

# NACOmatic

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**INSTRUMENT APPROACH PROCEDURE CHARTS**

**IFR ALTERNATE AIRPORT MINIMUMS**

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

**NAME ALTERNATE MINIMUMS**
**ALBANY, OR**

ALBANY MUNI ..... VOR/DME or GPS-A  
NA except for operators with approved weather reporting service.

**ARLINGTON, WA**

ARLINGTON MUNI ..... NDB or GPS Rwy 34  
Category D, 800-2½.  
NA when Paine Field control tower closed.

**ASTORIA, OR**

ASTORIA RGNL ..... RNAV (GPS) Rwy 26<sup>12</sup>  
VOR Rwy 8<sup>3</sup>

<sup>1</sup>NA when local weather not available.

<sup>2</sup>Categories A, B, 900-2; Category C, 900-2¾;  
Category D, 900-3.

<sup>3</sup>Category C, 800-2¼; Category D, 900-3.

**AURORA, OR**

AURORA STATE ..... LOC Rwy 17<sup>1</sup>  
RNAV (GPS) Rwy 17<sup>23</sup>  
RNAV (GPS) Rwy 35<sup>2</sup>

<sup>1</sup>Category D, 800-2¼.

<sup>2</sup>NA when local weather not available.

<sup>3</sup>Categories A, B, 900-2; Category C, 900-2½;  
Category D, 900-2¼.

**BAKER, MT**

BAKER MUNI ..... NDB Rwy 13<sup>1</sup>  
NDB Rwy 31<sup>2</sup>

<sup>1</sup>Categories A,B, 1100-2; Categories C,D,  
1100-3.

<sup>2</sup>Categories A,B, 1000-2; Category C, 1000-2¾;  
Category D, 1000-3.

**BAKER CITY, OR**

BAKER CITY MUNI ..... RNAV (GPS) Rwy 13<sup>12</sup>  
VOR-A<sup>13</sup>  
VOR/DME Rwy 13<sup>24</sup>

<sup>1</sup>NA when local weather not available.

<sup>2</sup>Category D, 900-2¾.

<sup>3</sup>Categories A,B, 1900-2; Categories C,D,  
1900-3.

<sup>4</sup>NA when control zone not in effect.

**NAME ALTERNATE MINIMUMS**
**BELLINGHAM, WA**

BELLINGHAM INTL ..... ILS or LOC Rwy 16  
RNAV (GPS) Rwy 16  
NA when local weather not available.

**BIG PINEY, WY**

MILEY MEMORIAL FIELD ..... VOR Rwy 31  
Category D, 800-2¼.

**BILLINGS, MT**

BILLINGS LOGAN  
INTL ..... NDB Rwy 10L<sup>1</sup>  
RNAV (GPS) Rwy 10L<sup>2</sup>  
RNAV (GPS) Rwy 28R<sup>3</sup>

<sup>1</sup>Category D, 800-2¼.

<sup>2</sup>Categories A,B,C,D, 800-2¼.

<sup>3</sup>Categories A,B, 900-2; Categories C,D,  
900-3.

**BOISE, ID**

BOISE AIR TERMINAL(GOWEN  
FIELD) ..... LOC BC Rwy 28L  
RNAV (GPS) Y Rwy 10R  
RNAV (GPS) Y Rwy 28L  
VOR/DME or TACAN Rwy 10L  
VOR/DME or TACAN Rwy 28L  
Category E, 1000-3.

**BOZEMAN, MT**

GALLATIN FIELD ..... RNAV (GPS)-A<sup>1</sup>  
VOR Rwy 12<sup>2</sup>

<sup>1</sup>Categories A, B, 1900-2; Categories C, D,  
1900-3.

<sup>2</sup>Categories A, B, 900-2; Category C, 900-2¾;  
Category D, 900-3.

**BREMERTON, WA**

BREMERTON NATIONAL .. RNAV (GPS) Rwy 1  
RNAV (GPS) Rwy 19<sup>1</sup>

NA when local weather not available.

<sup>1</sup>Categories A,B, 1200-2; Categories C,D,  
1200-3.

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# ALTERNATE MINS

M2

NAME ALTERNATE MINIMUMS  
**BUFFALO, WY**  
JOHNSON COUNTY ..... RNAV (GPS) Rwy 31<sup>1</sup>  
VOR/DME Rwy 31<sup>2</sup>  
NA when local weather not available.  
<sup>1</sup>Category D, 800-2¼.  
<sup>2</sup>Category C, 800-2¼; Category D, 800-2½.

**BURLEY, ID**  
BURLEY MUNI ..... VOR-A  
VOR/DME-B  
NA when local weather not received.

**BURLINGTON/MOUNT VERNON, WA**  
SKAGIT RGNL ..... NDB Rwy 10<sup>1</sup>  
RNAV (GPS) Rwy 10  
RNAV (GPS) Rwy 28  
NA when local weather not available.  
<sup>1</sup>Categories A,B, 1300-2; Categories C,D,  
1300-3.

**BURNS, OR**  
BURNS MUNI ..... VOR Rwy 30  
Categories A, B, 1400-2; Categories C,D,  
1400-3.

**BUTTE, MT**  
BERT MOONEY ..... ILS Y Rwy 15<sup>1</sup>  
LOC/DME Rwy 15<sup>2</sup>  
RNAV (GPS) Y Rwy 15<sup>3</sup>  
RNAV (GPS) Z Rwy 15,1200-2  
VOR or GPS-B,1400-3  
VOR/DME or GPS-A,3000-3  
<sup>1</sup>Categories A, B, C, 1200-4.  
<sup>2</sup>Categories A,B, 1300-2; Categories C,D,  
1300-3.  
<sup>3</sup>Categories A,B, 1500-2; Categories C,D,  
1500-3.

**CALDWELL, ID**  
CALDWELL  
INDUSTRIAL ..... RNAV (GPS) Rwy 12  
RNAV (GPS) Rwy 30  
NA when local weather not available.

**CASPER, WY**  
CASPER/NATRONA  
COUNTY INTL ..... ILS or LOC Rwy 3  
ILS, Categories A,B, 800-2; Category C 800-  
2½; Category D, 800-2¾; Category E, 900-3.  
LOC, Category C, 800-2½; Category D, 800-  
2¾; Category E, 900-3.

NAME ALTERNATE MINIMUMS  
**CHEYENNE, WY**  
CHEYENNE RGNL/JERRY OLSON  
FIELD ..... ILS or LOC Rwy 27<sup>1</sup>  
NDB Rwy 27<sup>1</sup>  
RNAV (GPS) Rwy 9<sup>2</sup>  
RNAV (GPS) Rwy 13<sup>2</sup>  
RNAV (GPS) Rwy 31<sup>2</sup>

<sup>1</sup>NA when control tower closed.  
<sup>2</sup>NA when local weather not available.

**CODY, WY**  
YELLOWSTONE  
REGIONAL ..... RNAV (GPS) Rwy 22<sup>1</sup>  
VOR or GPS-A<sup>2</sup>  
<sup>1</sup>Category C, 800-2¼; Category D, 200-2¾.  
<sup>2</sup>Category D, 900-3.

**COEUR D'ALENE, ID**  
COEUR D'ALENE-PAPPY  
BOYINGTON FIELD .... ILS or LOC/DME Rwy 5  
NDB Rwy 5  
RNAV (GPS) Rwy 5  
VOR Rwy 5  
VOR/DME Rwy 1  
NA when local weather not available.

**CORVALLIS, OR**  
CORVALLIS MUNI ..... RNAV (GPS) Rwy 35<sup>1</sup>  
VOR-A<sup>2</sup>  
<sup>1</sup>NA when local weather not available.  
<sup>2</sup>Categories A,B,1200-2; Categories C,D,  
1200-3.

**DEER PARK, WA**  
DEER PARK ..... RNAV (GPS) Rwy 34  
NA when local weather not available.

**DILLON, MT**  
DILLON ..... VOR or GPS-A,1500-3  
VOR/DME or GPS-B  
NA when Dillon altimeter setting not available.

**DOUGLAS, WY**  
CONVERSE COUNTY ..... VOR Rwy 29  
Categories A,B, 1100-2; Categories C,D,  
1100-3. DME standard.

**EASTSOUND, WA**  
ORCAS ISLAND ..... RNAV (GPS)-A  
Categories A, B, 1100-2.  
NA when local weather not available.

**ELLENSBURG, WA**  
BOWERS FIELD ..... RNAV (GPS) Rwy 25<sup>1</sup>  
RNAV (GPS) Rwy 29  
VOR-B<sup>2</sup>  
NA when local weather not available.  
<sup>1</sup>Category D, 800-2¼.  
<sup>2</sup>Category A, 1500-2.

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M3



**NAME** **ALTERNATE MINIMUMS**  
**EPHRATA, WA**  
 EPHRATA MUNI ..... RNAV (GPS) Rwy 3<sup>1</sup>  
    RNAV (GPS) Rwy 21<sup>2</sup>  
    VOR/DME Rwy 3<sup>1</sup>  
    VOR Rwy 21<sup>1</sup>

NA when local weather not available.

<sup>1</sup>Category D, 1300-3.

<sup>2</sup>Category C, 800-2¼; Category D, 1300-3.

## EUGENE, OR

MAHLON-SWEET  
 FIELD ..... ILS or LOC/DME Rwy 16R<sup>1</sup>  
    ILS or LOC/DME Rwy 16L<sup>1</sup>  
    RNAV (GPS) Rwy 34R<sup>2</sup>  
    VOR-A<sup>3</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>NA when local weather not available.

<sup>3</sup>Categories A, B, 900-2; Category C, 900-2½;

Category D, 900-2¼.

## EVANSTON, WY

EVANSTON-UINTA COUNTY  
 BURNS FIELD ..... ILS or LOC/DME Rwy 23  
 Categories C,D, 700-2.

## EVERETT, WA

SNOHOMISH COUNTY(PAINE  
 FIELD) ..... ILS or LOC/DME Rwy 16R  
 NA when control tower closed.  
 NA when local weather not available.

## FORT BENTON, MT

FORT BENTON ..... RNAV (GPS) Rwy 23  
 NA when local weather not available.

## GILLETTE, WY

GILLETTE-CAMPBELL  
 COUNTY ..... ILS or LOC Rwy 34<sup>12</sup>  
    RNAV (GPS) Rwy 16<sup>3</sup>  
    RNAV (GPS) Rwy 34<sup>4</sup>  
    VOR/DME Rwy 16<sup>5</sup>  
    VOR/DME Rwy 34<sup>1</sup>

<sup>1</sup>Categories A,B, 900-2; Category C, 900-2½;

Category D, 1000-3.

<sup>2</sup>NA when control tower closed.

<sup>3</sup>Categories A,B,C, 800-2¼; Category D,  
 1000-3.

<sup>4</sup>Categories A,B,C,D, 1200-4.

<sup>5</sup>Category C, 800-2¼; Category D, 1000-3.

## GLASGOW, MT

WOKAL FIELD/  
 GLASGOW INTL ..... VOR Rwy 12  
 Categories A,B, 900-2; Categories C,D, 900-3.  
 VOR/DME standard.

**NAME** **ALTERNATE MINIMUMS**  
**GLENDIVE, MT**  
 DAWSON  
 COMMUNITY ..... NDB or GPS Rwy 12,900-2¾

## GOODING, ID

GOODING MUNI ..... RNAV (GPS) Rwy 7  
    RNAV (GPS) Rwy 25  
 NA when local weather not available.

## GRAY AAF (KGRF)

FORT LEWIS, WA ..... NDB Rwy 15  
    NDB Rwy 33  
    ILS or LOC Rwy 15  
    COPTER NDB Rwy 15  
 NA when control tower closed.

## GREAT FALLS, MT

GREAT FALLS INTL ..... NDB Rwy 34  
 Category D, 800-2¼.

## GREYBULL, WY

SOUTH BIG HORN COUNTY .... RNAV (GPS)-A  
    RNAV (GPS) Rwy 33<sup>1</sup>  
 NA when local weather not available.  
<sup>1</sup>Category D, 1200-3.

## HAILEY, ID

FRIEDMAN  
 MEMORIAL ..... RNAV (GPS) W Rwy 31  
 Categories A,B, 1900-2; Category C, 1900-3.

## HAVRE, MT

HAVRE CITY-COUNTY ..... VOR Rwy 26  
 Categories A, B, 900-2; Category C, 900-2¾;  
 Category D, 900-3.

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# ALTERNATE MINS

M4

**NAME** **ALTERNATE MINIMUMS**  
**HELENA, MT**  
 HELENA RGNL ..... ILS or LOC Y Rwy 27<sup>12</sup>  
    ILS or LOC Z Rwy 27<sup>12</sup>  
    LOC/DME BC-C<sup>13</sup>  
    NDB-D<sup>14</sup>  
    RNAV (GPS) Y Rwy 9<sup>5</sup>  
    RNAV (GPS) Rwy 23<sup>5</sup>  
    RNAV (GPS) X Rwy 27<sup>5</sup>  
    RNAV (RNP) Z Rwy 9<sup>7</sup>  
    RNAV (RNP) Y Rwy 27<sup>7</sup>  
    RNAV (RNP) Z Rwy 27<sup>79</sup>  
    VOR-A<sup>8</sup>  
    VOR/DME-B<sup>6</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>Categories A, B, 1600-2; Categories C, D, E, 1600-3.

<sup>3</sup>Categories A, B, 1300-2; Categories C, D, 1300-3.

<sup>4</sup>Category A, 1200-2.

<sup>5</sup>Categories A, B, 1600-2; Categories C, D, 1600-3.

<sup>6</sup>Categories A, B, 900-2; Category C, 900-2½; Category D, 900-3.

<sup>7</sup>NA when local weather not available.

<sup>8</sup>Categories A, B, 2900-2; Categories C, D, 2900-3.

<sup>9</sup>1000-4.

## HOQUIAM, WA

BOWERMAN ..... RNAV (GPS) Rwy 24<sup>1</sup>  
    VOR/DME Rwy 24<sup>2</sup>  
    VOR Rwy 6<sup>1</sup>

<sup>1</sup>Category D, 800-2½.

<sup>2</sup>Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

## IDAHO FALLS, ID

IDAHO FALLS RGNL ..... ILS or LOC Rwy 20<sup>1</sup>  
    LOC BC Rwy 2<sup>2</sup>  
    RNAV (GPS) Y Rwy 2<sup>3</sup>  
    RNAV (GPS) Y Rwy 20<sup>3</sup>  
    VOR Rwy 20<sup>3</sup>

<sup>1</sup>ILS, Category E, 700-2½. LOC, Category E, 800-2½.

<sup>2</sup>Category E, 800-2½.

<sup>3</sup>NA when local weather not available.

## JACKSON, WY

JACKSON HOLE ..... RNAV (GPS) X Rwy 1<sup>1</sup>  
    RNAV (GPS) Y Rwy 19<sup>1</sup>  
    RNAV (RNP) Y Rwy 1, 10681200-4  
    VOR/DME Rwy 1<sup>2</sup>  
    VOR/DME Rwy 19<sup>3</sup>

<sup>1</sup>Categories A,B, 1200-2; Categories C,D, 1200-3.

<sup>2</sup>Categories A,B,1000-2; Categories C,D, 1000-3.

<sup>3</sup>Categories A,B,1400-2; Categories C,D, 1400-3.

**NAME** **ALTERNATE MINIMUMS**  
**JEROME, ID**  
 JEROME COUNTY ..... RNAV (GPS) Rwy 9  
    RNAV (GPS) Rwy 27<sup>1</sup>  
    VOR/DME-A

NA when local weather not available.

<sup>1</sup>Categories A, B, 1300-2; Categories C, D, 1300-3.

## JOHN DAY, OR

GRANT COUNTY RGNL/  
 OGILVIE FIELD ..... RNAV (GPS) Y Rwy 9  
    Category B, 900-2; Category C, 900-2½.

## KALISPELL, MT

GLACIER PARK INTL ..... ILS or LOC Rwy 2<sup>1</sup>  
    RNAV (RNP) Y Rwy 2<sup>2</sup>  
    RNAV (RNP) Rwy 20, 800-2½<sup>2</sup>

<sup>1</sup>ILS, Categories C, D, 700-2.

<sup>2</sup>NA when local weather not available.

## KELSO, WA

SOUTHWEST  
 WASHINGTON RGNL ..... RNAV (GPS) Rwy 12  
    Categories A, B, 900-2.

## KLAMATH FALLS, OR

KLAMATH FALLS .... ILS or LOC/DME Rwy 32<sup>1</sup>  
    RNAV (GPS) Rwy 14<sup>2</sup>  
    RNAV (GPS) Rwy 32<sup>3</sup>  
    VOR/DME or TACAN Rwy 14<sup>4</sup>  
    VOR/DME or TACAN Rwy 32<sup>4</sup>

<sup>1</sup>ILS, Category A, 800-2; Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.

LOC, Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.

<sup>2</sup>Categories A, B, 900-2; Category C, 900-2¾; Category D, 1000-3.

<sup>3</sup>Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.

<sup>4</sup>Category B, 900-2; Category C, 900-2¾; Category D, 1000-3; Category E, 1700-3.

## LAKEVIEW, OR

LAKE COUNTY ..... VOR/DME-A  
    Categories A,B, 900-2; Category C, 900-2½;  
    Category D, 900-2¾.

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**NAME** **ALTERNATE MINIMUMS**  
**LEWISTON, ID**  
 LEWISTON-NEZ PERCE  
 COUNTY ..... RNAV (GPS) Y Rwy 8<sup>1</sup>  
    RNAV (GPS) Y Rwy 26<sup>1</sup>  
    RNAV (RNP) Z Rwy 8<sup>2</sup>  
    RNAV (RNP) Z Rwy 12<sup>2</sup>  
    RNAV (RNP) Z Rwy 26<sup>2</sup>  
    VOR Rwy 8<sup>3</sup>  
    VOR Rwy 26<sup>1</sup>

<sup>1</sup>Category D, 800-2½.

<sup>2</sup>NA when local weather not available.

<sup>3</sup>Categories A, B, 1100-2; Categories C, D, 1100-3.

**LEWISTOWN, MT**  
 LEWISTOWN MUNI ..... RNAV (GPS) Rwy 7  
    VOR Rwy 7  
 Category D, 800-2½.

**LIVINGSTON, MT**  
 MISSION FIELD ..... VOR/DME-B<sup>1</sup>  
    VOR-A<sup>2</sup>  
<sup>1</sup>Categories A, B, 900-2; Category C, 900-2½;  
 Category D, 1000-3.  
<sup>2</sup>Categories A, B, 2200-2; Categories C, D, 2200-3.

**MC CALL, ID**  
 MC CALL MUNI ..... RNAV (GPS) Rwy 16<sup>1</sup>  
    RNAV (GPS) Y Rwy 34<sup>2</sup>  
    RNAV (GPS) Z Rwy 34<sup>3</sup>  
<sup>1</sup>Category C, 900-2½.  
<sup>2</sup>Categories A, B, 1600-2; Categories C, D, 1600-3.  
<sup>3</sup>NA when local weather not available.  
<sup>4</sup>Category C, 900-2½; Category D, 1000-3.

**MC MINNVILLE, OR**  
 MC MINNVILLE MUNI ..... ILS or LOC Rwy 22  
    RNAV (GPS) Rwy 4  
    RNAV (GPS) Rwy 22  
    VOR/DME-B  
 NA when local weather not available.  
 Category D 800-2½.

**NAME** **ALTERNATE MINIMUMS**  
**MEDFORD, OR**  
 ROGUE VALLEY INTL-  
 MEDFORD ..... ILS or LOC/DME Rwy 14<sup>12</sup>  
    LOC/DME BC-B<sup>23</sup>  
    RNAV (GPS)-D<sup>3</sup>  
    RNAV (GPS) Rwy 14<sup>4</sup>  
    VOR-A<sup>5</sup>  
    VOR/DME-C<sup>3</sup>  
    VOR/DME Rwy 14<sup>5</sup>

<sup>1</sup>ILS, Categories A, B, C, 700-2; Category D, 900-2½. LOC, Category D, 900-2½.

<sup>2</sup>NA when control tower closed.

<sup>3</sup>Categories A, B, 2300-2; Categories C, D, 2300-3.

<sup>4</sup>Categories A, B, 1100-2; Categories C, D, 1100-3.

<sup>5</sup>Categories A, B, 1400-2; Category C, D 1400-3.

**MISSOULA, MT**  
 MISSOULA INTL ..... ILS Z Rwy 11<sup>1</sup>  
    RNAV (GPS)-D<sup>2</sup>  
    RNAV (GPS) Y Rwy 11<sup>34</sup>  
    RNAV (RNP) Z Rwy 11<sup>3</sup>, 800-2½  
    VOR/DME-A<sup>5</sup>  
    VOR/DME-B<sup>6</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>Categories A, B, 1400-2; Category C, 1400-3; Category D, 1500-3.

<sup>3</sup>NA when local weather not available.

<sup>4</sup>Categories A, B, 1900-2; Categories C, D, 1900-3.

<sup>5</sup>Categories A, B, 2000-2; Categories C, D, 2000-3.

<sup>6</sup>Categories A, B, 1800-2; Categories C, D, 1800-3.

**MOSES LAKE, WA**  
 GRANT COUNTY INTL ... ILS or LOC Rwy 32R<sup>1</sup>  
    NDB Rwy 32R<sup>2</sup>  
    RNAV (GPS) Rwy 4<sup>1</sup>  
    RNAV (GPS) Rwy 14L<sup>1</sup>  
    RNAV (GPS) Rwy 22<sup>1</sup>  
    VOR Rwy 4<sup>2</sup>  
    VOR -1 Rwy 14L<sup>2</sup>  
    VOR -3 Rwy 14L<sup>2</sup>  
    VOR Rwy 22<sup>2</sup>  
    VOR Rwy 32R<sup>2</sup>

<sup>1</sup>NA when local weather not available.

<sup>2</sup>NA when control tower closed.



NAME ALTERNATE MINIMUMS

**PORTLAND, OR**

PORTLAND INTL ..... ILS or LOC Rwy 10L<sup>1</sup>  
 ILS or LOC Rwy 10R<sup>2</sup>  
 ILS or LOC Rwy 28L<sup>3</sup>  
 ILS or LOC Rwy 28R<sup>4</sup>  
 LOC/DME Rwy 21<sup>5</sup>  
 RNAV (GPS) Rwy 10L<sup>5</sup>  
 RNAV (GPS) Rwy 10R<sup>5</sup>  
 RNAV (GPS) Rwy 12<sup>5</sup>  
 RNAV (GPS) Rwy 28L<sup>5</sup>  
 RNAV (GPS) Rwy 28R<sup>5</sup>  
 VOR/DME Rwy 21<sup>5</sup>  
 VOR-A<sup>7</sup>  
 VOR Rwy 28R<sup>5</sup>

<sup>1</sup>ILS, Category A, 700-2; Categories B, C, 800-2; Category D, 1000-3. LOC, Category D, 1000-3.

<sup>2</sup>Categories A, B, C, 900-2; Category D, 1000-3; Category E, 1200-3.

<sup>3</sup>ILS, Category A, 700-2; Categories B, C, 800-2; Category D, 1000-3; Category E, 1200-3. LOC, Category D, 1000-3; Category E, 1200-3.

<sup>4</sup>ILS, Category A, 700-2; Categories B, C, 800-2; Category D, 1000-3. LOC, Category D, 1000-3.

<sup>5</sup>Category D, 1000-3.

<sup>6</sup>NA when local weather not available.

<sup>7</sup>Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.

PORTLAND-HILLSBORO ..ILS or LOC Rwy 12<sup>1</sup>  
 RNAV (GPS) Rwy 12  
 RNAV (GPS) Rwy 30

NA when local weather not available.

<sup>1</sup>Categories A, B, 1500-2; Categories C, D, 1500-3.

PORTLAND-TROUTDALE ..... NDB or GPS-A  
 Categories A,B, 1100-2; Category C, 1100-3; Category D, 1300-3.

**PULLMAN/MOSCOW, WA**  
 PULLMAN/MOSCOW  
 MUNI ..... RNAV (GPS) Rwy 5,800-2½

**RAWLINS, WY**  
 RAWLINS MUNI/  
 HARVEY FIELD ..... RNAV (GPS) Rwy 22<sup>1</sup>  
 VOR/DME Rwy 22<sup>2</sup>

<sup>1</sup>Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2½.

<sup>2</sup>Categories A, B, 1000-2; Category C, 1000-2½; Category D, 1000-3.

NAME ALTERNATE MINIMUMS

**REDMOND, OR**

ROBERTS FIELD ..... ILS or LOC Rwy 22<sup>1</sup>  
 VOR/DME Rwy 22<sup>2</sup>  
<sup>1</sup>ILS, LOC, Category D, 800-2½; Category E, 800-2½.  
<sup>2</sup>Category A, B, 1000-2; Category C, 1000-2½; Category D, E, 1000-3.

**RENTON, WA**  
 RENTON MUNI ..... NDB Rwy 16<sup>1</sup>  
 RNAV (GPS) Y Rwy 16<sup>2</sup>

NA when local weather not available.

<sup>1</sup>Categories A, B, 1000-2; Categories C, D, 1000-3.

<sup>2</sup>Categories A, B, 900-2; Category C, 900-2½; Category D, 900-3.

**REXBURG, ID**  
 REXBURG-MADISON  
 COUNTY ..... RNAV (GPS) Rwy 35  
 NA when local weather not available.  
 Category D, 800-2½.

**RICHLAND, WA**  
 RICHLAND ..... NDB Rwy 19<sup>1</sup>  
 RNAV (GPS) Rwy 19<sup>1</sup>  
 RNAV (GPS) Rwy 26<sup>1</sup>  
 VOR/DME-A<sup>2</sup>  
 VOR Rwy 26<sup>1</sup>

<sup>1</sup>Category D, 800-2½.

<sup>2</sup>Categories A,B, 900-2; Category C, 900-2½; Category D, 900-3.

**RIVERTON, WY**  
 RIVERTON RGNL ..... ILS or LOC Rwy 28  
 RNAV (GPS) Rwy 10  
 RNAV (GPS) Rwy 28  
 VOR Rwy 10  
 VOR Rwy 28

NA when local weather not available.

**ROSEBURG, OR**  
 ROSEBURG RGNL ..... RNAV (GPS)-B  
 NA when local weather not available.  
 Categories A, B, 1200-2; Category C, 1200-3; Category D, 1400-3.

**SALEM, OR**  
 MCNARY FIELD ..... ILS or LOC Rwy 31<sup>12</sup>  
 LOC/DME Rwy 31<sup>3</sup>  
 RNAV (GPS) Rwy 31<sup>13</sup>

<sup>1</sup>NA when local weather not available.

<sup>2</sup>ILS, Categories A, B, 800-2; Category C, 800-2½; Category D, 800-2½. LOC, Category C, 800-2½; Category D, 800-2½.

<sup>3</sup>Category D, 800-2½.

**NAME** **ALTERNATE MINIMUMS**  
**SALMON, ID**  
LEMHI COUNTY ..... RNAV (GPS)-D  
NA when local weather not available.  
Categories A, B, 3000-2; Category C, 3000-3.

**SCAPPOOSE, OR**  
SCAPPOOSE INDUSTRIAL  
AIRPARK ..... VOR/DME or GPS-A  
Category B, 900-2; Category C, 1000-2½;  
Category D 1300-3.

**SEATTLE, WA**  
BOEING FIELD-KING COUNTY  
INTL ..... ILS or LOC Rwy 31L<sup>1</sup>  
LOC/DME Rwy 13R<sup>2</sup>  
RNAV (GPS) Y Rwy 13R<sup>3</sup>  
RNAV (RNP) Z Rwy 13R<sup>4</sup>

<sup>1</sup>Category A, 800-2; Category B, 900-2;  
Category C, 900-2½; Category D, 1000-3.

<sup>2</sup>Category B, 900-2; Category C, 900-2½;  
Category D, 1000-3.

<sup>3</sup>Category B, 900-2; Category C, 900-2½;  
Category D, 1000-3.

<sup>4</sup>Categories A, B, C, D, 800-2½.

**SHERIDAN, WY**  
SHERIDAN  
COUNTY ..... ILS or LOC/DME Rwy 32  
RNAV (GPS) Rwy 14  
RNAV (GPS) Rwy 32  
VOR Rwy 14  
NA when local weather not received.  
Category D, 800-2½.

**SIDNEY, MT**  
SIDNEY-RICHLAND MUNI ..... NDB Rwy 1<sup>1</sup>  
NDB Rwy 19<sup>2</sup>  
RNAV (GPS) Rwy 1<sup>3</sup>  
RNAV (GPS) Rwy 19<sup>3</sup>

NA when local weather not available.

<sup>1</sup>Categories A, B, 900-2; Category C, 900-2½;  
Category D, 900-2½.

<sup>2</sup>Categories A, B, 1000-2; Category C, 1000-2½;  
Category D, 1000-3.

<sup>3</sup>Category D, 800-2½.

**NAME** **ALTERNATE MINIMUMS**  
**SPOKANE, WA**  
FELTS FIELD ..... ILS/DME Rwy 21R<sup>1</sup>  
RNAV (GPS)-A<sup>2</sup>  
RNAV (GPS) Rwy 3L<sup>2</sup>  
VOR Rwy 3L<sup>3,4</sup>  
<sup>1</sup>Categories A,B, 1000-2; Category C, 1000-2¾.  
<sup>2</sup>Categories A,B, 1000-2; Category C, 1000-2¾;  
Category D, 1000-3.  
<sup>3</sup>Categories A, B, 1000-2; Categories C, D,  
1000-3.  
<sup>4</sup>NA when local weather not available.

SPOKANE INTL ..... ILS or LOC Rwy 3<sup>1</sup>  
RNAV (GPS) Rwy 3<sup>2</sup>  
VOR Rwy 3<sup>3</sup>

<sup>1</sup>ILS, Category D, 700-2.

<sup>2</sup>Category D, 800-2½.

<sup>3</sup>Category E, 800-2½.

**TACOMA, WA**  
TACOMA NARROWS ..... ILS Rwy 17<sup>1</sup>  
NDB Rwy 35<sup>1</sup>  
RNAV (GPS) Rwy 17<sup>1,2</sup>  
RNAV (GPS) Rwy 35<sup>2,3</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>Category D, 800-2½.

<sup>3</sup>NA when local weather not available.

**THE DALLES, OR**  
COLUMBIA GEORGE RGNL/  
THE DALLES MUNI ..... RNAV (GPS)-A  
Categories A,B, 1100-2; Category C, 1100-3;  
Category D, 1200-3.

**TWIN FALLS, ID**  
JOSLIN FIELD-MAGIC VALLEY  
RGNL ..... ILS or LOC Rwy 25<sup>1</sup>  
NDB Rwy 25  
RNAV (GPS) Rwy 7  
RNAV (GPS) Rwy 25  
VOR Rwy 7<sup>2</sup>

NA when local weather not available.

<sup>1</sup>ILS, Category D, 700-2; Category E, 900-3.

LOC, Category E, 900-3.

<sup>2</sup>Category C, 800-2½; Category D, 800-2½.



NAME ALTERNATE MINIMUMS

## WALLA WALLA, WA

WALLA WALLA RGNL ..... ILS or LOC Rwy 20<sup>1</sup>  
 ILS or LOC Y Rwy 20<sup>13</sup>  
 ILS or LOC/DME Z Rwy 20<sup>23</sup>  
 NDB Rwy 20, 1000-3  
 RNAV (GPS) Rwy 2<sup>34</sup>  
 RNAV (GPS) Rwy 16<sup>4</sup>  
 RNAV (GPS) Rwy 20<sup>4</sup>  
 VOR/DME Rwy 2<sup>4</sup>

<sup>1</sup>ILS, LOC, Categories A, B, 1100-2; Categories C, D, 1100-3.

<sup>2</sup>ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.

<sup>3</sup>NA when local weather not available.

<sup>4</sup>Category D, 800-2½.

## WENATCHEE, WA

PANGBORN

MEMORIAL ..... ILS Y Rwy 12, 1300-4  
 RNAV (RNP) Rwy 12, 1200-4  
 VOR/DME-C<sup>12</sup>  
 VOR/DME-A<sup>3</sup>

<sup>1</sup>NA when local weather not available.

<sup>2</sup>Categories A, B, 1500-2; Categories C, D, 1500-3.

<sup>3</sup>Categories A, B, 2000-2; Categories C, D, 2000-3.

## WOLF POINT, MT

L.M. CLAYTON ..... RNAV (GPS) Rwy 11  
 RNAV (GPS) Rwy 29

NA when local weather not available.

## WORLAND, WY

WORLAND MUNI ..... VOR or GPS Rwy 16  
 Categories C,D, 800-2½.

## YAKIMA, WA

YAKIMA AIR TERMINAL/

MCALLISTER FIELD .... ILS Y Rwy 27, 600-2¼<sup>1</sup>  
 LOC/DME BC-B<sup>12</sup>  
 RNAV (GPS) Y Rwy 27<sup>3</sup>  
 VOR/DME or TACAN Rwy 27<sup>4</sup>  
 VOR-A<sup>5</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>Category D, 800-2¼.

<sup>3</sup>Category C, 800-2½; Category D, 800-2¾.

<sup>4</sup>Categories A, B, 1100-2; Categories C, D, 1100-3.

<sup>5</sup>Category C, 800-2¼; Category D, 800-2½.

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# RADAR MINS

10210

## RADAR INSTRUMENT APPROACH MINIMUMS

### CHEYENNE, WY

Amdt 1B, MAY 8, 2008 (FAA)

ELEV 6159

### CHEYENNE RGNL/JERRY OLSON FIELD

RADAR - 124.55 263.075 ▽ ▲ NA

PAR	RWY	GS/TCH/RP	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS
PAR	27	3.0°/55/918	ABCDE	6321/24	200	(200-½)				
ASR	9		ABC	6500-1	357	(400-1)	DE	6500-1¼	357	(400-1¼)
	27		ABC	6520/24	399	(400-½)	DE	6520/50	399	(400-1)
CIR	ALL		AB	6660-1	501	(600-1)	C	6660-1½	501	(600-1½)
			D	6720-2	561	(600-2)	E	6960-2¾	801	(900-2¾)

For inoperative MALSR increase, PAR 27 category E visibility to RVR 4000, ASR 27 category D visibility to RVR 6000 and ASR 27 category E visibility to 1½. PAR not available when ASR out of service.

### GRAY AAF (KGRF), FORT LEWIS, WA (Amdt 1 10210 USA)

ELEV 300

RADAR - (E) 128.2 139.925 239.0 317.4 ▽ ▲ NA

PAR <sup>1</sup>	RWY	GS/TCH/RP	CAT	DH/ MDA-VIS	HAT/ HAA	CEIL-VIS
	15	3.0°/55/853	ABCD	499/24	200	(200-½)
	33	3.0°/39/729	ABCD	500-½	200	(200-½)

<sup>1</sup>Opr cont exc federal holidays. POC DSN 357-4953 or C253-967-4953. Svc incl PAR and apch mnt of ILS and NDB.

OPS 138.6

Contact Seattle approach for vectors to Final on 120.1 290.9

Missed Approach:

Rwy 15: Climb to 1000, then climbing left turn to 2000 via heading 270° for RADAR vectors; or when directed by ATC, climb to 1000, then climbing left turn to 2000 direct GRF NDB and hold NW, RT, 147° inbound (ADF REQUIRED).

Rwy 33: Climb to 1000, then climbing left turn to 2000 via heading 270° for RADAR vectors; or when directed by ATC, climb to 2000 direct GRF NDB and hold NW, RT, 147° inbound (ADF REQUIRED).

LOST COMMUNICATIONS (ALL RWYS): As directed by ATC on initial contact.

NW-1

## RADAR INSTRUMENT APPROACH MINIMUMS

### RADAR MINS

10210

N1

21 OCT 2010 to 18 NOV 2010

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# RADAR MINS

10210


## RADAR INSTRUMENT APPROACH MINIMUMS

### OAK HARBOR (OKH), WA

Amdt 1A, Mar 12, 2009 (FAA)

ELEV 193

A J EISENBERG


RADAR - 118.2 285.65 

	<u>RWY</u>	<u>GS/TCH/RPI</u>	<u>CAT</u>	<u>DA/ MDA-VIS</u>	<u>HAT/ HATH/ HAA</u>	<u>CEIL-VIS</u>
ASR	7		AB CD	620-1 NA	427	(500-1)
CIR	All Rwy		A B CD	620-1 660-1 NA	427 467	(500-1) (500-1)

When local altimeter setting not received, use Whidbey Island NAS altimeter setting and increase all MDAs 40 feet. Circling north of Rwy 7-25 NA at night. Visibility reduction by helicopters NA.

### WHIDBEY ISLAND NAS (KNUW), (AULT FLD) WA (10210 USN)

ELEV 47

RADAR - (E) 126.05x 126.85x 266.8x 299.6x 310.8x 322.5x 327.0x 343.75x 

	<u>RWY</u>	<u>GS/TCH/RPI</u>	<u>CAT</u>	<u>DH/ MDA-VIS</u>	<u>HAT/ HATH/ HAA</u>	<u>CEIL-VIS</u>
PAR <sup>1</sup>	14 <sup>5 12</sup> 32 <sup>7 14</sup> 7 <sup>3 11</sup> 25 <sup>2 13</sup>	3.0°/48/947 3.0°/34/772 3.0°/50/961 3.0°/40/718	ABCDE ABCDE ABCDE ABCDE	139- <sup>1</sup> / <sub>4</sub> 297- <sup>1</sup> / <sub>2</sub> 125- <sup>1</sup> / <sub>2</sub> 228- <sup>1</sup> / <sub>2</sub>	100 250 100 200	(100- <sup>1</sup> / <sub>4</sub> ) (300- <sup>1</sup> / <sub>2</sub> ) (100- <sup>1</sup> / <sub>2</sub> ) (200- <sup>1</sup> / <sub>2</sub> )
W/O GS	7 14 <sup>7 12</sup>  32 <sup>8 10</sup>  25 <sup>6 13</sup>		ABCDE AB CDE ABC DE AB C D E	300-1 360- <sup>1</sup> / <sub>2</sub> 360- <sup>3</sup> / <sub>4</sub> 500- <sup>3</sup> / <sub>4</sub> 500-1 620- <sup>1</sup> / <sub>2</sub> 620-1 620-1 <sup>1</sup> / <sub>4</sub> 620-1 <sup>1</sup> / <sub>2</sub>	275 321 321 453 453 593 593 593 593	(300-1) (400- <sup>1</sup> / <sub>2</sub> ) (400- <sup>3</sup> / <sub>4</sub> ) (500- <sup>3</sup> / <sub>4</sub> ) (500-1) (600- <sup>1</sup> / <sub>2</sub> ) (600-1) (600-1 <sup>1</sup> / <sub>4</sub> ) (600-1 <sup>1</sup> / <sub>2</sub> )
ASR	7 <sup>11</sup>  14 <sup>4 12</sup>  32 <sup>8 12</sup>		AB C DE  AB C D E  AB C D E	460-1 460-1 <sup>1</sup> / <sub>4</sub> 460-1 <sup>1</sup> / <sub>2</sub>  620- <sup>1</sup> / <sub>2</sub> 620-1 620-1 <sup>1</sup> / <sub>4</sub> 620-1 <sup>1</sup> / <sub>2</sub>  680- <sup>1</sup> / <sub>2</sub> 680-1 <sup>1</sup> / <sub>4</sub> 680-1 <sup>1</sup> / <sub>2</sub> 680-1 <sup>3</sup> / <sub>4</sub>	435 435 435  581 581 581 581  633 633 633 633	(500-1) (500-1 <sup>1</sup> / <sub>4</sub> ) (500-1 <sup>1</sup> / <sub>2</sub> )  (600- <sup>1</sup> / <sub>2</sub> ) (600-1) (600-1 <sup>1</sup> / <sub>4</sub> ) (600-1 <sup>1</sup> / <sub>2</sub> )  (700- <sup>1</sup> / <sub>2</sub> ) (700-1 <sup>1</sup> / <sub>4</sub> ) (700-1 <sup>1</sup> / <sub>2</sub> ) (700-1 <sup>3</sup> / <sub>4</sub> )

NW-1

## RADAR INSTRUMENT APPROACH MINIMUMS

### RADAR MINS

10210

N2

21 OCT 2010 to 18 NOV 2010

21 OCT 2010 to 18 NOV 2010

## RADAR INSTRUMENT APPROACH MINIMUMS

## WHIDBEY ISLAND NAS (KNUW) WA (CONT'd)

25 <sup>10 11</sup>	A	780-½	753	(800-½)
	B	780-¾	753	(800-¾)
	C	780-1¾	753	(800-1¾)
	D	780-2	753	(800-2)
	E	780-2¼	753	(800-2¼)
CIRCLING 7, 14, 25, 32 <sup>9</sup>	A	740-1	693	(700-1)
	B	800-1¼	753	(800-1¼)
	C	800-2¼	753	(800-2¼)
	D	860-2¾	813	(900-2¾)
	E	1120-3	1073	(1100-3)
CIRCLING 25 <sup>9</sup> ASR	A	780-1	733	(800-1)
	B	800-1¼	753	(800-1¼)
	C	800-2¼	753	(800-2¼)
	D	860-2¾	813	(900-2¾)
	E	1120-3	1073	(1100-3)

<sup>1</sup>No-NOTAM MP: PAR 1600-0800Z++ Mon. <sup>2</sup>When ALS inop, increase vis CAT ABCDE to ¾ mile.

<sup>3</sup>Missed approach minimum climb rate 226'/NM until reaching 3000. <sup>4</sup>When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1½ miles, CAT D to 1¾ miles, CAT E to 2 miles. <sup>5</sup>When ALS inop, increase CAT ABCDE vis to ½ mile. <sup>6</sup>When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1½ miles, CAT D to 1¾ miles, CAT E to 2 miles. <sup>7</sup>When ALS inop, increase vis CAT ABCDE to 1 mile. <sup>8</sup>When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¾ miles, CAT D to 2 miles, CAT E to 2¼ miles. <sup>9</sup>When Circling to RWY 32, increase vis CAT A to 1¾ mile. <sup>10</sup>When ALS inop, increase vis CAT A to 1 mile, CAT B to 1¼ miles, CAT C to 2¼ miles, CAT D to 2½ miles, CAT E to 2¾ miles. <sup>11</sup>Amdt 1. <sup>12</sup>Amdt 2. <sup>13</sup>Amdt 3. <sup>14</sup>Amdt 4.

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

**AFTON, WY**

AFTON MUNI

DEPARTURE PROCEDURE: **Rwy 16**, Use LUNDI  
DEPARTURE: **Rwy 34**, use AFTON DEPARTURE.

**ALBANY, OR**

ALBANY MUNI

DEPARTURE PROCEDURE: **Rwy 16**, turn right.  
**Rwy 34**, turn left. **All aircraft** climb direct CVO VOR/  
DME and continue climb in CVO VOR/DME holding  
pattern. (E, right turns, 261° inbound) to cross CVO  
VOR/DME at or above 3000.

**ANACONDA, MT**

BOWMAN FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, std. w/ min. climb of 417'  
per NM to 9000, or 2800-3 for climb in visual conditions.  
**Rwy 17**, std. w/ min. climb of 321' per NM to 10200, or  
2800-3 for climb in visual conditions. **Rwy 22**, NA-  
obstacles. **Rwy 35**, std. w/ min. climb of 369' per NM to  
9100, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 35**, climbing right  
turn to 10200 via heading 130° and CPN VOR/DME R-  
340 to CPN VOR/DME, continue climb-in-hold to 10200  
(north, left turn, 166° inbound), or for climb in visual  
conditions, cross Bowman Field Airport at or above 7700  
then proceed via CPN R-309 to CPN VOR/DME,  
continue climb-in-hold to 10200 (north, left turn, 166°  
inbound).

NAME TAKE-OFF MINIMUMS

**BOWMAN FIELD (CONT)**

**Rwy 17**, climbing left turn to 10200 via heading 100° and  
CPN VOR/DME R-335 to CPN VOR/DME, continue  
climb-in-hold to 10200 (north, left turn, 166° inbound), or  
for climb in visual conditions, cross Bowman Field  
Airport at or above 7700 then proceed via CPN R-309 to  
CPN VOR/DME, continue climb-in-hold to 10200 (north,  
left turn, 166° inbound).

NOTE: **Rwy 17**, multiple trees beginning 865' from  
departure end of runway, 243' left of centerline, up to 70'  
AGL/5097' MSL. Rod on hangar 570' from departure  
end of runway, 278' left of centerline, 54' AGL/5054'  
MSL. Multiple trees beginning 787' from departure end  
of runway, 165' right of centerline, up to 70' AGL/5098'  
MSL. Multiple transmission lines beginning 4602' from  
departure end of runway, 1664' right of centerline, 80'  
AGL/5159' MSL. **Rwy 35**, multiple transmission lines  
beginning 2242' from departure end of runway, 964' left  
of centerline, up to 80' AGL/5159' MSL.

**ARCO, ID**

ARCO-BUTTE COUNTY (AOC)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6**, NA - Obstacles.  
DEPARTURE PROCEDURE: Use JATTS  
DEPARTURE.



## ARLINGTON, WA

### ARLINGTON MUNI

TAKE-OFF MINIMUMS: **Rwy 11**, 600-2 or std. with a min. climb of 350' per NM to 700. **Rwy 34**, 500-2 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 11**, turn right.

**Rwy 16**, climb direct to WATON LOM. **Rwys 29, 34**, turn left. All aircraft climb direct to WATON LOM. Aircraft departing WATON LOM on bearings 150° CW 200° and bearings 260° CW 340° from WATON LOM continue climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 4500 then continue climb on course. Aircraft departing WATON LOM on bearings 200° CW 260° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 1500 then continue climb on course.

## ASTORIA, OR

### ASTORIA RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 800-3 or std. with a min. climb of 320' per NM to 900. **Rwy 13**, 700-2 or std. with a min. climb of 350' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 8, 31**, turn left.

**Rwy 13**, climb runway heading to 800 then climbing right turn. **Rwy 26**, turn right. Aircraft departing northwestbound climb via AST R-290 on course. All other aircraft climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

## AUBURN, WA

### AUBURN MUNI

DEPARTURE PROCEDURE: Use AUBURN DEPARTURE.

## AURORA, OR

### AURORA STATE

DEPARTURE PROCEDURE: **Rwy 17**, turn right, thence... **Rwy 35**, turn left, thence...

...Aircraft proceeding via V23 climb on course; All others climb in UBG VOR/DME holding pattern (hold south, left turn, 003° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight.

NOTE: **Rwy 17**, multiple trees 31' from departure end of runway, 273' right of centerline, up to 90' AGL/270' MSL. Multiple trees beginning 979' from departure end of runway, 247' right of centerline up to 113' AGL/316' MSL. Road 254' from departure end of runway, 350' left of centerline, 16' AGL/209' MSL. **Rwy 35**, multiple trees and road beginning 31' from departure end of runway, 163' left of centerline, up to 138' AGL/329' MSL. Multiple trees beginning 973' from departure end of runway, 281' right of centerline, up to 58' AGL/253' MSL.

## BAKER, MT

### BAKER MUNI

NOTE: **Rwy 13**, 51' derrick 2200' from departure end of runway on centerline. 100' trees south of airport, near runway, various locations. **Rwy 31**, 146' antenna on tower 4000' from departure end of runway, 1800' left of centerline. 114' rod on OL antenna 3800' from departure end of runway on centerline.

## BAKER CITY, OR

### BAKER CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 8**, 900-2 or std. with a min. climb of 315' per NM to 6000, (788' per min. at 150K, 1050' per min. at 200K, 1313' per min. at 250K).

**Rwy 13**, 1400-2 or std. with a min. climb of 310' per NM to 6000 (775' per min. at 150K, 1033' per min. at 200K, 1292' per min. at 250K). **Rwy 17**, NA. **Rwy 31**, 1300-2 or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K). **Rwy 35**, CAT C, D 1000-2; or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K).

DEPARTURE PROCEDURE: **Rwys 8, 13**, turn left.

**Rwys 26, 31, 35**, turn right. All aircraft climb direct BKE VOR/DME. Continue climb in BKE holding pattern (SE, right turns, 298° inbound) to cross BKE VOR/DME at or above MCA or MEA for route of flight.

## BELLINGHAM, WA

### BELLINGHAM INTL

DEPARTURE PROCEDURE: **Rwy 16**, climb heading 160° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound. **Rwy 34**, climb heading 340° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.

NOTE: **Rwy 16**, lighted windsock 9' from departure end of runway, 259' right of centerline, 16' AGL/181' MSL. Multiple trees beginning 747' from departure end of runway, 405' right of centerline, up to 68' AGL/213' MSL. Multiple trees beginning 1128' from departure end of runway, 57' left of centerline, up to 104' AGL/249' MSL. **Rwy 34**, lighted windsock 93' from departure end of runway, 516' right of centerline, 27' AGL/169' MSL. Multiple trees beginning 1372' from departure end of runway, 619' right of centerline, up to 134' AGL/246' MSL.

## BEND, OR

### BEND MUNI (BDN)

### AMDT 4 09183 (FAA)

DEPARTURE PROCEDURE: Use BEND DEPARTURE.

## BIG PINEY, WY

### MILEY MEMORIAL FIELD

TAKE-OFF MINIMUMS: **Rwys 8, 26**, NA.

DEPARTURE PROCEDURE: **Rwy 13**, climb to 8400 via BPI R-124. **Rwy 31**, climb to 10800 via BPI R-320 thence all aircraft climb on course.



## BILLINGS, MT

BILLINGS LOGAN INTL (BIL)

AMDT 5 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10R**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 10L**, Climb heading 098° to 4600 before turning right.

NOTE: **Rwy 10L**, fence 466' from departure end of runway, 535' right of centerline, 11' AGL/3511' MSL, cars on road, beginning from 624' from departure end of runway, 427' right of centerline, 15' AGL/3523' MSL, ground beginning 21' from departure end of runway, 499' right of centerline, 0' AGL/3505' MSL. **Rwy 25**, airport security fence, abeam departure end of runway, 500' left of centerline, 11' AGL/3672' MSL to 1200' from departure end of runway, abeam rwy centerline, 11' AGL/3672' MSL.

## BLACKFOOT, ID

MCCARLEY FIELD

DEPARTURE PROCEDURE: **Rwy 1**, climb to 7000 (or higher assigned altitude) direct IDA VOR/DME, before proceeding on course. **Rwy 19**, climb to 7000 (or higher assigned altitude) direct PIH VORTAC, before proceeding on course.

## BOISE, ID

BOISE AIR TERMINAL / GOWEN FIELD (BOI)

AMDT 6 10042 (FAA)

DEPARTURE PROCEDURE: Use GOWEN DEPARTURE.

## BONNERSFERRY, ID

BOUNDARY COUNTY (65S)

ORIG 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2**, NA-Terrain.

DEPARTURE PROCEDURE: **Rwy 20**, use KARPS (RNAV) DEPARTURE.

## BOZEMAN, MT

GALLATIN FIELD (BZN)

AMDT 3 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-ATC.

DEPARTURE PROCEDURE: **Rwys 12, 30**, use BOZEMAN DEPARTURE.

## BREMERTON, WA

BREMERTON NATIONAL (PWT)

AMDT 3 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1**, 300-1 or std. w/ min.

climb of 410' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 1**, Climbing right turn to 6000 direct CAN NDB, thence... **Rwy 19**, Climb to 6000 direct CAN NDB, thence...

...Continue climb-in-hold (S, LT, 013° inbound) to 6000 before proceeding on course.

NOTES: **Rwy 1**, Multiple bushes 380' from departure end of runway, 522' left of centerline, up to 17' AGL/456' MSL, multiple trees and poles beginning 1210' from departure end of runway, 622' left of centerline, up to 100' AGL/561' MSL, multiple trees and bushes 1012' from departure end of runway, 708' right of centerline, up to 100' AGL/495' MSL. **Rwy 19**, Multiple trees beginning 176' from departure end of runway, 337' left of centerline, up to 100' AGL/514' MSL, multiple trees beginning 371' from departure end of runway, 277' right of centerline, up to 100' AGL/548' MSL.

## BUFFALO, WY

JOHNSON COUNTY

TAKE-OFF MINIMUMS: Northbound aircraft:

**Rwys 13, 31**, 2400-2 or std. w/ min. climb of 300' per NM to 7500. Southbound aircraft: **Rwy 31**, 400-2 or std. w/ min. climb of 300' per NM to 6000.

DEPARTURE PROCEDURE: Northbound aircraft:

**Rwy 13**, turn left. **Rwy 31**, climb straight ahead.

**All aircraft** proceed via SHR R-139 to SHR VORTAC.

Southbound aircraft: **Rwy 13**, climb straight ahead.

**Rwy 31**, turn right. **All aircraft** proceed via CZI R-319 to CZI VOR/DME.

## BURLEY, ID

BURLEY MUNI (BYI)

AMDT 5 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwy 24**, 300-1½ or std. w/ min. climb of 428' per NM to 4500.

DEPARTURE PROCEDURE: **Rwy 2**, climbing left turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold Northwest right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight. **Rwy 6**, climbing left turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold Northwest right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight. **Rwy 20**, climbing right turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold Northwest right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight. **Rwy 24**, climbing right turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold Northwest right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight.

NOTE: **Rwy 2**, obstruction light on bridge 252' from DER, 513' left of centerline, 57' AGL/4195' MSL. Trees beginning 686' from DER, 201' right of centerline, up to 35' AGL/4184' MSL. Tree 694' from DER, 375' left of centerline, 29' AGL/4178' MSL. Obstruction light on building 736' from DER, 188' left of centerline, 11' AGL/4161' MSL. Tower 803' from DER, 590' left of centerline, 55' AGL/4204' MSL. Vehicles on road beginning 857' from DER, 1' right of centerline, up to 17' AGL/4168' MSL. Poles beginning 1226' from DER, 549' left of centerline, up to 72' AGL/4222' MSL. Building vent 1240' from DER, 164' left of centerline, 27' AGL/4177' MSL. Stack 2206' from DER, 856' right of centerline, 86' AGL/4236' MSL. Stack 2573' from DER, 614' left of centerline, 86' AGL/4236' MSL. Elevators beginning 3980' from DER, 131' right of centerline, up to 133' AGL/4283' MSL. **Rwy 6**, trees beginning 46' from DER, 172' right of centerline, up to 14' AGL/4163' MSL. Rising terrain beginning 49' from DER, 326' right of centerline, up to 4149' MSL. Bush 150' from DER, 103' right of centerline, 5' AGL/4147' MSL. Antenna 586' from DER, 398' left of centerline, 15' AGL/4165' MSL. Obstruction light on bridge 1061' from DER, 80' right of centerline, 39' AGL/4179' MSL.





## BURLINGTON MOUNT VERNON, WA

**Rwy 20**, obstruction light pole 42' from DER, 124' left of centerline, 16' AGL/4170' MSL. Railroad beginning 65' from DER, 4' left of centerline, up to 23' AGL/4177' MSL. Sign 181' from DER, 121' right of centerline, 18' AGL/4172' MSL. Vehicles on road 162' from DER, 2' left of centerline, 17' AGL/4169' MSL. Vehicles on road beginning 335' from DER 348' right of centerline up to 17' AGL/4171' MSL. Pole 446' from DER, 210' right of centerline, 26' AGL/4180' MSL. Antenna 523' from DER, 337' right of centerline, 63' AGL/4217' MSL. Tree 586' from DER, 213' right of centerline, 28' AGL/4182' MSL. Trees beginning 2014' from DER, 339' left of centerline, up to 96' AGL/4251' MSL.

**Rwy 24**, vehicles on road beginning 25' from DER, 9' left of centerline, up to 15' AGL/4169' MSL. Fence 58' from DER, 8' left of centerline, 4' AGL/4154' MSL. Rising terrain beginning 69' from DER, 201' right of centerline, up to 4154' MSL. Railroad 152' from DER, 6' left of centerline, 23' AGL/4176' MSL. Trees beginning 427' from DER, 101' right of centerline, up to 69' AGL/4223' MSL. Vehicles on road beginning 509' from DER, 586' right of centerline, up to 15' AGL/4169' MSL. Railroad beginning 568' from DER, 288' right of centerline, up to 23' AGL/4177' MSL. Pole 735' from DER, 185' left of centerline, 18' AGL/4172' MSL. Light standard 824' from DER, 58' right of centerline, 23' AGL/4177' MSL. Antenna 1630' from DER, 112' left of centerline, 58' AGL/4212' MSL. Tower 2766' from DER, 175' left of centerline, 123' AGL/4282' MSL. Tower 3570' from DER, 158' right of centerline, 157' AGL/4312' MSL. Obstruction light on elevators beginning 3115' from DER, 164' left of centerline, up to 184' AGL/4344' MSL.

## BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL (BVS)  
ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 3000-2 or std. with a min. climb of 340' per NM to 3600. **Rwy 10**, 1700-2 or std. with a min. climb of 245' per NM to 2300. **Rwy 22**, 1300-2 or std. with a min. climb of 210' per NM to 1800. DEPARTURE PROCEDURE: **Rwys 4, 10, 22**, turn right heading 280°. **Rwy 28**, climb runway heading.

**All aircraft** climb to 2500 then turn right direct BVS NDB to cross BVS at or above 4500. Aircraft departing on BVS R-145 CW R-330 climb on course. All others continue climbing in BVS holding pattern (NW, right turns 113° inbound) to cross BVS at or above 6800 before proceeding on course.

**NOTE: Rwy 4**, tree 2581' from departure end of runway, 426' left of centerline, 100' AGL/212' MSL. Light pole 1489' from departure end of runway, 136' left of centerline 35' AGL/137' MSL. Bush 126' from departure end of runway, 430' right of centerline, 20' AGL/101' MSL. Building 2925' from departure end of runway, 130' left of centerline, 60' AGL/180' MSL.

## BURNS, OR

BURNS MUNI

DEPARTURE PROCEDURE: **Rwy 3**, climbing right turn, thence... **Rwy 12**, climb to 4600 via heading 117°, thence... **Rwys 21, 30**, climbing left turn, thence... All aircraft departing on ILR R-072 CW R-209, climb on course. All others climb on ILR R-123 within 10 NM to cross ILR VOR/DME at or above 5000.

**NOTE: Rwy 21**, pole 820' from departure end of runway, 357' left of centerline, 20' AGL/4169' MSL.

## BUTTE, MT

BERT MOONEY

TAKE-OFF MINIMUMS: **Rwy 11**, NA-obstacles. **Rwy 15**, std. w/ min. climb of 601' per NM to 7300, or 3300-3 for climb in visual conditions. **Rwy 29**, std. w/ min. climb of 832' per NM to 6700, or 3300-3 for climb in visual conditions. **Rwy 33**, std. w/ min. climb of 355' per NM to 6800, or 3300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15**, climbing right turn direct CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence... **Rwy 29**, climb heading 293° to intercept CPN VOR/DME R-082 to CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence... **Rwy 33**, climb direct CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence...

...climb in CPN VOR/DME holding pattern (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA before proceeding enroute.

**NOTE: Rwy 15**, multiple trees beginning 2 NM from departure end of runway, 1779' right of centerline, up to 100' AGL/6659' MSL. Tree 2.1 NM from departure end of runway, 66' left of centerline, 100' AGL/5934' MSL.

**Rwy 29**, multiple trees and poles beginning 364' from departure end of runway, 7' right of centerline, up to 100' AGL/5621' MSL. Multiple trees and lights beginning 322' left of centerline, up to 100' AGL/5582' MSL. Terrain and numerous trees beginning 1.2 NM from departure end of runway, 1022' left of centerline, up to 100' AGL/6379' MSL. **Rwy 33**, flagpole 1095' from departure end of runway, 730' left of centerline, 64' AGL/5583' MSL.

## CALDWELL, ID

CALDWELL INDUSTRIAL

TAKE-OFF MINIMUMS: **Rwy 12**, std. with a min. climb of 300' per NM to 5600, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12**, climb via heading 119° to 5600 before proceeding on course. For climb in visual conditions: Cross Caldwell Industrial Airport at or above 4800 before proceeding on course. **Rwy 30**, climb via heading 299° to 4400 before proceeding on course.

**NOTE: Rwy 12**, levee 198' from departure end of runway, 281' left of centerline, 0' AGL/2451' MSL. Multiple trees 1462' from departure end of runway, 877' right of centerline, up to 100' AGL/2505' MSL. **Rwy 30**, multiple poles 206' from departure end of runway, 389' right of centerline, up to 39' AGL/2457' MSL. Rod 353' from departure end of runway, 246' right of centerline, 21' AGL/2439' MSL.

## CASPER, WY

CASPER/NATRONA COUNTY INTL (CPR)

AMDT 3A 09155 (FAA)

DEPARTURE PROCEDURE: **Rwys 3, 8, 12**, turn left.

**All other runways**, turn right. **All aircraft** climb direct DDY VORTAC before proceeding on course, or comply with published Casper SIDs.

## CHEHALIS, WA

### CHEHALIS-CENTRALIA

DEPARTURE PROCEDURE: **Rwy 16**, climb to 1000 via heading 160° then climbing left turn to 4000 via heading 001° and OLM R-151 to OLM VORTAC before proceeding on course. **Rwy 34**, climb to 4000 via heading 340° and OLM R-176 to OLM VORTAC before proceeding on course.

## CHEYENNE, WY

### CHEYENNE RGNL/JERRY OLSON FIELD

NOTE: **Rwy 13**, multiple trees beginning 74' from departure end of runway, 115' left of centerline, up to 40' AGL/6166' MSL. Multiple trees, pole, and fence beginning 34' from departure end of runway, 167' right of centerline, up to 40' AGL/6154' MSL. **Rwy 27**, multiple trees and poles beginning 525' from departure end of runway, 271' left of centerline, up to 40' AGL/6216' MSL. Multiple trees and poles beginning 1222' from departure end of runway, 275' right of centerline, up to 40' AGL/6211' MSL. **Rwy 31**, multiple trees, road, fence and sign beginning 196' from departure end of runway, 76' left of centerline, up to 40' AGL/6238' MSL. Multiple poles and sign beginning 407' from departure end of runway, 8' left of centerline, up to 69' AGL/6229' MSL.

## CODY, WY

### YELLOWSTONE RGNL (COD)

#### AMDT 4 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, std. with a min. climb of 400' per NM to 8000' or 4200-3 for climb in visual conditions. **Rwy 22**, std. with a min. climb of 385' per NM to 7400' or 4200-3 for climb in visual conditions. DEPARTURE PROCEDURE: **Rwy 4**, climb heading 038° to 5900, then climbing left turn via COD R-171 to COD VOR/DME or for climb in visual conditions to cross Yellowstone Rgnl at or above 9400, then via COD R-189 to COD VOR/DME to cross COD VOR/DME at or above MEA for route of flight. **Rwy 22**, climb heading 218° to 6600, then climbing left turn via COD R-180 to COD VOR/DME or for climb in visual conditions to cross Yellowstone Rgnl at or above 9400, then via COD R-189 to COD VOR/DME to cross COD VOR/DME at or above MEA for route of flight.

NOTE: **Rwy 4**, trees beginning 100' from DER, 262' right of centerline, up to 79' AGL/5199' MSL. Rising terrain beginning 1723' from DER, 304' right of centerline, up to 5146' MSL. **Rwy 22**, poles beginning 1 NM from DER, 406' right of centerline, up to 60' AGL/5332' MSL. Rising terrain beginning 1 NM from DER, 109' right of centerline, up to 6235' MSL. Rising terrain beginning 5074' from DER, 131' left of centerline, up to 5428' MSL.

## COEUR D'ALENE, ID

### COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

#### AMDT 9 10042 (FAA)

DEPARTURE PROCEDURE: use COEUR D'ALENE DEPARTURE.

## COLSTRIP, MT

### COLSTRIP (M46)

#### AMDT 2 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6** use CISPU (RNAV) DEPARTURE. **Rwy 24**, use CONUK (RNAV) DEPARTURE.

## CONRAD, MT

### CONRAD

DEPARTURE PROCEDURE: **Rwy 24**, climb runway heading to 4300, then continue climb on course.

## CORVALLIS, OR

### CORVALLIS MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35**, std. with a min. climb of 290' per NM to 3100 or 1700-3 for climb in visual conditions. **Rwy 27**, std. with a min. climb of 310' per NM to 3100 or 1700-3 for climb in visual conditions. DEPARTURE PROCEDURE: **Rwys 9, 17**, climbing left turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400. **Rwys 27, 35**, climbing right turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400. ...climb in CVO VOR/DME holding pattern (E, RT, 261° inbound) to depart at or above 3400.

NOTE: **Rwy 9**, multiple trees and railroad beginning 549' from departure end of runway, 254' left of centerline, up to 153' AGL/383' MSL. Multiple trees and railroad beginning 670' from departure end of runway, 5' right of centerline, up to 135' AGL/380' MSL. **Rwy 27**, obstruction light on glideslope 409' from departure end of runway, 325' left of centerline, 28' AGL/273' MSL. **Rwy 35**, multiple trees beginning 470' from departure end of runway, 544' left of centerline up to 36' AGL/276' MSL.

## COWLEY/LOVELL/BYRON, WY

### NORTH BIG HORN COUNTY

DEPARTURE PROCEDURE: **Rwys 9, 27**, aircraft departing via HCY NDB bearings 130° CW 225° climb on course, all others climb in HCY NDB holding pattern (W, right turns, 078° inbound) to cross HCY NDB at or above 9000.



## DEER PARK, WA

DEER PARK (DEW)  
AMDT 1 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34**, 300-1½ or std. with a min. climb of 455' per NM to 2500.

DEPARTURE PROCEDURE: **Rwy 4**, climbing right turn heading 165° and GEG VORTAC R-006 to GEG VORTAC. **Rwy 16**, climb heading 164° and GEG VORTAC R-006 to GEG VORTAC. **Rwy 22**, climbing left turn heading 155° and GEG VORTAC R-006 to GEG VORTAC. **Rwy 34**, climbing right turn heading 165° and GEG VORTAC R-006 to GEG VORTAC.

NOTE: **Rwy 4**, aircraft 261' from DER, 511' left of centerline, up to 21' AGL/2210' MSL. Trees beginning 1809' from DER, 413' left of centerline, up to 109' AGL/2299' MSL. Aircraft 104' from DER, 186' right of centerline, up to 21' AGL/2200' MSL. Trees beginning 1667' from DER, 373' right of centerline, up to 116' AGL/2319' MSL. **Rwy 16**, trees beginning 31' from DER, 455' left of centerline, up to 109' AGL/2279' MSL. Trees beginning 2587' from DER, 621' right of centerline, up to 104' AGL/2264' MSL. **Rwy 22**, trees beginning 1461' from DER, 211' right of centerline, up to 90' AGL/2270' MSL. **Rwy 34**, aircraft 23' from DER, 218' left of centerline, up to 21' AGL/2230' MSL. Trees beginning 2678' from DER, 18' left of centerline, up to 165' AGL/2375' MSL. Vehicles beginning 74' from DER, 339' right of centerline, up to 15' AGL/2234' MSL. Trees beginning 2219' from DER, 260' right of centerline, up to 100' AGL/2382' MSL.

## DILLON, MT

DILLON

TAKE-OFF MINIMUMS: **Rwys 3,21**, NA.

DEPARTURE PROCEDURE: **Rwys 16,34**, turn right, climb in DLN VOR/DME holding pattern (N, right turns, 185° inbound) to cross DLN VOR/DME at or above; northwestbound V257 8500; southwestbound V121 8500; northbound V21 7600; southeastbound V21, V257 9400.

## DOUGLAS, WY

CONVERSE COUNTY

TAKE-OFF MINIMUMS: **Rwy 5**, 300-2 or std. with a min. climb of 250' per NM to 5200. **Rwy 23**, 1700-3 or std. with a min. climb of 260' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 5**, climbing right turn via IIP VOR/DME R-342 to IIP VOR/DME. **Rwy 11**, climbing right turn via IIP VOR/DME R-312 to IIP VOR/DME. **Rwy 23**, climbing left turn via IIP VOR/DME R-264 to IIP VOR/DME. **Rwy 29**, climbing right turn via IIP VOR/DME R-325 to IIP VOR/DME. **All aircraft** departing IIP R-253 CW R-180 climb on course. All others continue climb in IIP VOR/DME holding pattern (NW, left turns, 125° inbound) to cross IIP VOR/DME at or above: R-181 CW R-199 9600; R-200 CW R-252 8000.

NOTE: **Rwy 5**, trees 1883' from departure end of runway, 549' right of centerline, 35' AGL/5014' MSL. Trees 3407' from departure end of runway, 209' right of centerline, 35' AGL/5074' MSL. Trees 5458' from departure end of runway, 1954' right of centerline, 35' AGL/5132' MSL. **Rwy 23**, trees 2068' from departure end of runway, 1008' left of centerline, 35' AGL/4994' MSL. Trees 3130' from departure end of runway, 1215' left of centerline, 35' AGL/5014' MSL.

## DRIGGS, ID

DRIGGS-REED MEMORIAL (DIJ)

AMDT 2 08157 (FAA)

DEPARTURE PROCEDURE: Use LAMON DEPARTURE.

## EASTSOUND, WA

ORCAS ISLAND (ORS)

AMDT 1 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, NA-Terrain. **Rwy 34**, 500-3 or std. w/ min. climb of 224' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 34**, climbing right turn to 2000 to intercept HUH VORTAC R-210 to HUH VORTAC, then climb-in-hold (hold South, Left turns, 352° inbound) to cross HUH VORTAC at or above 3800 before proceeding on course.

NOTE: **Rwy 34**, trees beginning 330' from DER, 411' left of centerline, up to 120' AGL/139' MSL.

## ELLENSBURG, WA

BOWERS FIELD

TAKE-OFF MINIMUMS: **Rwys 7,11**, 4600-3 or std. with a min. climb of 290' per NM to 7800. **Rwy 25**, 4700-3 or std. with a min. climb of 340' per NM to 7800. **Rwy 29**, 4600-3 or std. with a min. climb of 320' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 7, 29**, climbing right turn direct ELN VORTAC. **Rwys 11, 25**, climbing left turn direct ELN VORTAC. **All aircraft**, continue climbing in the ELN VORTAC holding pattern (W, right turns, 087° inbound) to MEA/MOCA for route of flight.

## EPHRATA, WA

EPHRATA MUNI (EPH)

AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 3**, climb heading 027° to 2300 before proceeding on course. **Rwy 11**, climb heading 112° to 2200 before proceeding on course. **Rwy 21**, climb heading 207° to 2800 before proceeding on course.

## EUGENE, OR

MAHLON SWEET FIELD (EUG)

AMDT 7 10266 (FAA)

DEPARTURE PROCEDURE: **Rwys 16L, 16R**, climb heading 163° to 1000 then climbing right turn... **Rwys 34L, 34R**, climb heading 343° to 1000 then climbing left turn...

...all aircraft climb direct EUG VORTAC, then climb in hold in EUG VORTAC holding pattern (hold north, right turns, 175° inbound) to cross EUG VORTAC at or above MEA before proceeding on course.

NOTE: **Rwy 16L**, multiple power poles beginning 1036' from DER, 74' right of centerline, up to 35' AGL/408' MSL. Multiple power poles beginning 1017' from DER, 211' left of centerline, up to 31' AGL/404' MSL. **Rwy 16R**, tree 1991' from DER, 83' left of centerline, 54' AGL/419' MSL. Numerous trees beginning 1504' from DER, 489' right of centerline, up to 43' AGL/408' MSL. **Rwy 34L**, tree 1597' from DER, 842' left of centerline, 50' AGL/404' MSL. **Rwy 34R**, tree 2897' from DER, 806' right of centerline, 77' AGL/440' MSL. Tree 2535' from DER, 643' left of centerline, 65' AGL/428' MSL.





## EVANSTON, WY

EVANSTON-UINTA COUNTY BURNS FIELD  
DEPARTURE PROCEDURE: **Rwy 5**, climb via heading  
050° and FBR VOR/DME R-243 to FBR VOR/DME.

**Rwy 23**, climbing left turn via heading 030° and FBR  
VOR/DME R-243 to FBR VOR/DME.

**All aircraft:** cross FBR VOR/DME at or above MEA for  
direction of flight.

## EVERETT, WA

SNOHOMISH COUNTY (PAINE FIELD)

TAKE-OFF MINIMUMS: **Rwy 29**, std. with a min. climb of  
353' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 11, 16L/R**, climbing  
right turn, thence... **Rwys 29, 34L/R**, climbing left turn,  
thence...

...for aircraft departing via V287 west bound, climb via  
PAE VOR/DME R-236 to 3000. All others, climb direct  
PAE VOR/DME, climb in PAE VOR/DME holding  
pattern (NW, RT, 149° inbound) to MEA for route of  
flight before proceeding on course.

**NOTE:** **Rwy 11**, multiple antennas on building, rod on  
obstruction light, and trees beginning 326' from  
departure end of runway, 387' right of centerline, up to  
85' AGL/664' MSL. Tree 1156' from departure end of  
runway, 600' left of centerline, 93' AGL/672' MSL. **Rwy**  
**16L**, multiple trees and pole beginning 588' from  
departure end of runway, 220' left of centerline, up to 118'  
AGL/697' MSL. Multiple trees, pole, and building  
beginning 449' from departure end of runway, 162' right  
of centerline, up to 78' AGL/657' MSL. **Rwy 16R**,  
multiple trees beginning 1228' from departure end of  
runway, 168' left of centerline, up to 140' AGL/699' MSL.  
Multiple trees beginning 707' from departure end of  
runway, 158' right of centerline, up to 118' AGL/687'  
MSL. **Rwy 29**, multiple trees beginning 45' from  
departure end of runway, 66' left of centerline, up to 111'  
AGL/630' MSL. Multiple trees beginning 343' from  
departure end of runway, 44' right of centerline, up to  
110' AGL/689' MSL. **Rwy 34R**, multiple trees and pole  
beginning 3340' from departure end of runway, 180' right  
of centerline, up to 95' AGL/674' MSL. Tree 5762' from  
departure end of runway, 221' left of centerline, 103'  
AGL/682' MSL.

## FAIRCHILD AFB (KSKA)

SPOKANE, WA . . . . . ORIG, 08017

DEPARTURE PROCEDURES: **Rwy 5**, climb on track  
048° to intercept SKA R-045 to 5300, then on  
course. **Rwy 23**, climb on track 241° to 3400, then  
on course.

TAKE-OFF OBSTACLES: **Rwy 23**, Terrain 2468'  
MSL, 194' from DER, 405' right of centerline. Terrain  
2477' MSL, 461' from DER, 751' right of centerline.  
Terrain 2477' MSL, 509' from DER, 750' right of  
centerline.

## FORT BENTON, MT

FORT BENTON

TAKE-OFF MINIMUMS: **Rwys 5, 23**, std. w/ min. climb  
of 274' per NM to 8900 or 5100-3 for climb in visual  
conditions.

DEPARTURE PROCEDURE: **Rwys 5, 23**, for climb in  
visual conditions: Cross Fort Benton Airport at or above  
8900 MSL before proceeding on course.

## FORT BRIDGER, WY

FORT BRIDGER

DEPARTURE PROCEDURE: **All aircraft** climb direct  
FBR VOR/DME. Aircraft departing: FBR R-210 CW  
R-135 climb on course; FBR R-136 CW R-209 cross  
FBR VOR/DME at or above 9000. (Hold NE, right  
turns, 215° inbound).

## FRIDAY HARBOR, WA

FRIDAY HARBOR

TAKE-OFF MINIMUMS: **Rwy 34**, 500-1.

DEPARTURE PROCEDURE: Aircraft departing FHR  
NDB **Rwy 34**, climbing right turn direct FHR NDB, then  
climb on course. All other aircraft climb on course.

## GILLETTE, WY

GILLETTE-CAMPBELL COUNTY (GCC)

AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. w/ min. climb of  
275' per NM to 5600, or 1200-3 for climb in visual  
conditions. **Rwy 21**, 600-3 or std. w/ min. climb of 425'  
per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 16**, climb via  
heading 158° to 5100, before proceeding on course or,  
for climb in visual conditions cross Gillette-Campbell  
County airport at or above 5400 before proceeding on  
course. **Rwy 21**, climb via heading 206° to 5200, before  
proceeding on course.

**NOTE:** **Rwy 3**, windsock 1415' from DER, 100' left of  
centerline, 24' AGL/4366' MSL. Trees beginning 1976'  
from DER, 267' right of centerline, up to 30' AGL/4409'  
MSL. **Rwy 16**, tower and poles beginning 1.61 NM from  
DER, 1264' left of centerline, up to 57' AGL/4696' MSL.  
Post and trees beginning 1.77 NM from DER, 300' right  
of centerline, up to 51' AGL/4789' MSL. **Rwy 21**, fence  
328' from DER, 267' left of centerline, 7' AGL/4352'  
MSL, trees 2077' from DER, 1011' right of centerline,  
30' AGL/4449' MSL, tree 7029' from DER, 2378' right of  
centerline, 30' AGL/4729' MSL. **Rwy 34**, fence 1236'  
from DER, 723' left of centerline, 16' AGL/4380' MSL.  
Vehicle on road 1609' from DER, 419' left of centerline,  
15' AGL/4394' MSL. Trees 3093' from DER, 936' right  
of centerline, 30' AGL/4449' MSL. Vehicle on road  
1610' from DER, 419' left of centerline, 15' AGL/4380'  
MSL.

## GOODING, ID

GOODING MUNI (GNG)

ORIG 08269 (FAA)

DEPARTURE PROCEDURE: **Rwy 7**, climb heading  
068° to 5000 before turning left. **Rwy 25**, climb heading  
233° to 5600 before turning right.

**NOTE:** **Rwy 7**, rising terrain 59' from departure end of  
runway, 479' right of centerline, up to 3754' MSL. Fence  
line 653' from departure end of runway, 332' right of  
centerline, 12' AGL up to 3751' MSL. Bushes starting  
877' from departure end of runway, 420' right of  
centerline, 20' AGL up to 3795' MSL. **Rwy 25**, vehicle on  
road, 91' from departure end of runway, 257' left of  
centerline, up to 10' AGL/3678' MSL.

## GRANGEVILLE, ID

IDAHO COUNTY (S80)  
AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, NA - Obstacles.  
DEPARTURE PROCEDURE: **Rwy 25**, Use MELLR  
DEPARTURE.

## GRANTS PASS, OR

GRANTS PASS

TAKE-OFF MINIMUMS: **Rwy 12**, NA. **Rwy 30**, 4000-3 or  
std. with a min. climb of 360' per NM to 5000.  
DEPARTURE PROCEDURE: **Rwy 30**, climb via heading  
320 until passing 5000, then climbing right turn direct  
RBG VOR/DME. Cross RBG VOR/DME at or above  
MEA for route of flight.

## GRAY AAF (KGRF)

FORT LEWIS, WA . . . . . AMDT 2, 10098

**Rwy 15**, Standard

**Rwy 33**, 300-1\*

\* Or standard with minimum climb of 430'/NM to 600.

DEPARTURE PROCEDURE: **Rwy 15**, Climb heading  
147° to 700 then climbing left turn direct GRF NDB.

**Rwy 33**, Climb direct GRF NDB. Aircraft departing  
330° CW 070° and 135° CW 260° bearing from GRF  
NDB climb on course. All others continue climb in GRF  
NDB holding pattern (hold NW, RT, 147° inbound) to  
cross GRF NDB at or above: 071° CW 134° bearing  
from GRF NDB, 8500'; 261° CW 329° bearing from GRF  
NDB, 1500.

TAKE-OFF OBSTACLES: **Rwy 15**, Tree 100' AGL/ 439'  
MSL, 1848' from DER, 430' right of centerline. **Rwy 33**,  
Tree 100' AGL/479' MSL, 3465' from DER, 1338' left of  
centerline.

## GREAT FALLS, MT

GREAT FALLS INTL

NOTE: **Rwy 7**, obstruction light on lighted wind sock 237'  
from departure end of runway, 519' left of centerline, 34'  
AGL/3694' MSL. Obstruction light on building 2226'  
from departure end of runway, 614' left of centerline, 78'  
AGL/3738' MSL. Building on 681' from departure end of  
runway, 583' right of centerline, 48' AGL/3688' MSL.  
Multiple light poles beginning 1359' from departure end  
of runway, 440' right of centerline, up to 90' AGL/3746'  
MSL. **Rwy 21**, pole 1544' from departure end of runway,  
791' left of centerline, 45' AGL/3725' MSL. **Rwy 25**,  
windmill 2.3 NM from departure end of runway, 4197'  
right of centerline, 338' AGL/4003' MSL.

## GREYBULL, WY

SOUTH BIG HORN COUNTY (GEY)

ORIG-A 09239 (FA)

TAKE-OFF MINIMUMS: **Rwy 25**, 300-1 or std. w/ min.  
climb of 260' per NM to 4200.

DEPARTURE PROCEDURE: **All runways**, for  
departures on Gey bearings 320° CW 150°, climb in  
GEY NDB holding pattern to 9000 before departing on  
course, then continue climb to MEA or assigned altitude.  
Departures Gey bearings 150° CW 320° climb on  
course.

NOTE: **Rwy 25**, bush 4955' from DER, 1268' right of  
centerline, 2' AGL/4101' MSL.

## GUERNSEY, WY

CAMP GUERNSEY

TAKE-OFF MINIMUMS: **Rwy 14**, 300-1 or std. with a  
min. climb of 320' per NM to 4700. **Rwy 32**, 1400-2 or  
std. with a min. climb of 320' per NM to 5800.

DEPARTURE PROCEDURE: **Rwy 14**, climb to 5600  
via heading 150°. **Rwy 32**, climb to 5800 via heading  
070°. **All aircraft** continue on course.

## HAILEY, ID

FRIEDMAN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 13**, 2700-3 w/ min. climb  
of 307' per NM to 6400, or 3600-3 for climb in visual  
conditions. **Rwy 31**, NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 13**, Climbing right  
turn heading 149°, then on 160° course to HLE NDB,  
or for climb in visual conditions: cross Friedman  
Memorial Airport at or above 8800 heading 151°, then  
on 151° course to HLE NDB.

NOTE: **Rwy 13**, multiple trees beginning 763' from  
departure end of runway, 3' right of centerline, up to  
100' AGL/5345' MSL. Multiple trees beginning 1.3  
NM from departure end of runway, 2587' right of  
centerline, up to 100' AGL/6099' MSL.

## HAMILTON, MT

RAVALLI COUNTY

DEPARTURE PROCEDURE: Use HAMEY RNAV  
DEPARTURE.

## HAVRE, MT

HAVRE CITY-COUNTY (HVR)

AMDT 3 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8**, 300-1½ or std. w/  
min. climb of 217' per NM to 3300.

DEPARTURE PROCEDURE: **Rwy 3**, climb heading  
032° to 3300 then climbing left turn to 8000 direct HVR  
VOR/DME thence... **Rwy 8**, climb heading 077° to 3300  
then climbing left turn to 8000 via HVR R-025 to HVR  
VOR/DME thence... **Rwy 21**, climb heading 212° to  
3300 then climbing right turn to 8000 direct HVR VOR/  
DME thence... **Rwy 26**, climb heading 257° to 3300 then  
climbing right turn to 8000 direct HVR VOR/DME  
thence...

...continue climb in hold in HVR VOR/DME holding  
pattern (hold west, right turns, 094° inbound) to cross  
HVR VOR/DME at or above 8000 before proceeding  
on course.

NOTE: **Rwy 3**, pole 2682' from DER, 1044' left of  
centerline, 21' AGL/2680' MSL. **Rwy 8**, obstruction  
light on windsock 59' from DER, 224' left of centerline,  
9' AGL/2588' MSL. Tree 1192' from DER, 752' left of  
centerline, 25' AGL/2610' MSL. Tank 1.3 NM from  
DER, 2287' left of centerline, 57' AGL/2797' MSL. **Rwy 26**,  
light on windsock, 50' from DER, 225' right of  
centerline, 9' AGL/2589' MSL. Trees beginning 1617'  
from DER, 650' right of centerline, 25' AGL/2659'  
MSL.

## HELENA, MT

HELENA RGNL (HLN)  
ADMT 9 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5**, 2500-3 or std. w/ min. climb of 250' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 9**, std. w/ min. climb of 240' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 23**, 1600-3 or std. w/ min. climb of 560' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 27**, 1600-3 or std. w/ min. climb of 390' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwys 16, 34, NA**.

DEPARTURE PROCEDURE: **Rwys 5, 9**, climbing left turn heading 270°. **Rwys 23, 27**, climbing right turn heading 020°. **All Aircraft**: continue climb northwestbound via HLN R-318 to 8100, then climbing right turn direct HLN VORTAC, cross HLN VORTAC at or above 9000, before proceeding on course, or for climb in visual conditions: cross Helena Rgnl airport northbound at or above 5300 and continue climbing via HLN R-336 to WOKEN INT before proceeding on course.

NOTE: **Rwy 5**, ground beginning 5' from departure end of runway, 495' right of centerline, up to 3826' MSL. Fence beginning 423' from departure end of runway, 331' right of centerline, up to 10' AGL/3832' MSL. **Rwy 23**, pole 2198' from departure end of runway, 462' left of centerline, 76' AGL/3996' MSL, tree 1011' from departure end of runway, 379' left of centerline, 44' AGL/3964' MSL, rod on building 953' from departure end of runway, 321' left of centerline, 323' AGL/943' MSL, tree 1519' from departure end of runway, 142' right of centerline, 53' AGL/3953' MSL. **Rwy 27**, building 1593' from departure end of runway, 731' left of centerline, 58' AGL/6385' MSL. Ground beginning 101' from departure end of runway, 346' left of centerline, up to 3871' MSL. Tree 1567' from departure end of runway, 616' left of centerline, 47' AGL/3906' MSL.

## HERMISTON, OR

HERMISTON MUNI

NOTE: **Rwy 4**, tower 379' left of departure end of runway, 50' AGL/698' MSL. **Rwy 22**, light pole 456' left of departure end of runway, 44' AGL/684' MSL.

## HOQUIAM, WA

BOWERMAN

TAKE-OFF MINIMUMS: **Rwy 6**, 600-2 or std. with a min. climb of 260' per NM to 600.  
DEPARTURE PROCEDURE: **Rwy 6**, climbing right turn heading 110°. **Rwy 24**, climb runway heading.  
**All aircraft** climb to 600 continue climb on course.

## HULETT, WY

HULETT MUNI (W43)  
ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, std. w/ min. climb of 450' per NM to 6300, or 500-2½ w/ min. climb of 295' per NM to 7700, or 2200-3 for climb in visual conditions.  
DEPARTURE PROCEDURE: **Rwy 13**, climb to 7700 via heading 132° before proceeding on course, or climb in visual conditions: cross Hulett Muni Airport at or above 6300 before proceeding on course. **Rwy 31**, climbing right turn on a heading between 090° clockwise to 115° from departure end of runway to 7700 before proceeding on course.

NOTE: **Rwy 13**, road 398' from departure end of runway, 37' left of centerline, 15' AGL/4296' MSL, truck on road 1126' from departure end of runway, 346' right of centerline, 15' AGL/4334' MSL, trees beginning 4945' from departure end of runway, across centerline, up to 100' AGL/4657' MSL. **Rwy 31**, terrain 104' from departure end of runway, 420' left of centerline, 4200' MSL, terrain 344' from departure end of runway, 233' left of centerline, 4207' MSL.

## IDAHO FALLS, ID

IDAHO FALLS RGNL (IDA)  
AMDT 4 09351 (FAA)

DEPARTURE PROCEDURE: **All aircraft** departing IDA R-160 CW R-040 climb on course. **All others** climb direct IDA VOR/DME. Continue climb in IDA holding pattern (South, left turns, 019° inbound) to cross IDA VOR/DME at or above 7500 before proceeding on course.

NOTE: **Rwy 2**, pole 1039' from DER, 758' left of centerline, 42' AGL/4762' MSL. **Rwy 17**, trees, flagpole, building, light and vent on buildings, and vehicle on road beginning 29' from DER, 10' right of centerline, up to 84' AGL/4820' MSL. Trees and vent on building beginning 569' from DER, 22' left of centerline, up to 35' AGL/4760' MSL. Trees, antenna, and light poles beginning 1853' from DER, 26' right of centerline, up to 121' AGL/4851' MSL. **Rwy 35**, trees and railroad beginning 410' from DER, 503' right of centerline, up to 49' AGL/4769' MSL. Tree 1034' from DER, 715' left of centerline, 42' AGL/4762' MSL.

## JACKSON, WY

JACKSON HOLE

DEPARTURE PROCEDURE: **Rwy 1**, use GEYSER DEPARTURE. **Rwy 19**, use TETON DEPARTURE.

**JEROME, ID**

JEROME COUNTY (JER)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 500-1¼ or std. w/ min. climb of 435' per NM to 4700.DEPARTURE PROCEDURE: **Rwy 9**, climb heading 086° to 5300 before proceeding on course. **Rwy 27**, climb heading 266° to 4800 before proceeding on course.

NOTE: **Rwy 9**, bush 140' from DER, 500' left of centerline, 16' AGL/4076' MSL. Poles starting 1432' from DER, 32' left of centerline, up to 47' AGL/4169' MSL. Sign 1473' from DER, 547' left of centerline, 49' AGL/4119' MSL. Obstruction light on building 1510' from DER, 6' left of centerline, 43' AGL/4103' MSL. Trees starting 1651' from DER, 100' left of centerline, up to 53' AGL/4137' MSL. Building 2186' from DER, 173' left of centerline, 29' AGL/4119' MSL. Rising terrain starting 2549' from DER, 560' left of centerline, up to 4219' MSL. AG equip 4752' from DER, 517' left of centerline, 26' AGL/4175' MSL. Poles starting 600' from DER, 254' right of centerline, up to 48' AGL/4173' MSL. **Rwy 27**, fence starting 18' from DER, 440' left of centerline, up to 9' AGL/3969' MSL.

**JOHN DAY, OR**

GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

AMDT 1 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35**, NA, Terrain. DEPARTURE PROCEDURE: **Rwy 27**, climbing left turn to 12000 heading 270° and IMB R-100 to IMB VORTAC, climb in IMB VORTAC holding pattern (E, right turns, 280° inbound) to cross IMB VORTAC at or above MEA for route of flight.NOTE: **Rwy 27**, fence beginning 195' from departure end of runway, 50' right of centerline, up to 16' AGL/3665' MSL. Trees beginning 229' from departure end of runway, 261' right of centerline, up to 26' AGL/3662' MSL. Bush 389' from departure end of runway, 438' right of centerline, 20' AGL/3659' MSL.**KALISPELL, MT**

GLACIER PARK INTL

DEPARTURE PROCEDURE: Use SKOTT DEPARTURE.

**KELSO, WA**

SOUTHWEST WASHINGTON RGNL (KLS)

AMDT 3 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, NA, terrain. **Rwy 30**, std. with a min. climb of 370' per NM to 1900 or 1900-2½ for climb in visual conditions.DEPARTURE PROCEDURE: **Rwy 30**, climb heading 303° to 1900 then climbing right turn to 3900 direct LSO NDB. Continue climb in LSO NDB holding pattern (North, right turns, 175° inbound) to cross LSO NDB at or above 3900, then via BTG R-310 to BTG VORTAC. For climb in visual conditions: cross Southwest Washington Rgnl at or above 1800, then via BTG R-309 to BTG VORTAC.NOTE: **Rwy 30**, light pole 22' from DER, 301' right of centerline, 30' AGL/49' MSL. Windsock 235' from DER, 348' left of centerline, 30' AGL/49' MSL. Rotating beacon 502' from DER, 425' left of centerline, 50' AGL/70' MSL. Multiple trees beginning 213' from DER, 530' right to 747' left of centerline, up to 136' AGL/155' MSL. Pole 964' from DER, 44' right of centerline, 30' AGL/50' MSL.**KEMMERER, WY**

KEMMERER MUNI (EMM)

AMDT 1 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 10, 22, 28**, NA - Rwy surfaces.DEPARTURE PROCEDURE: **Rwy 16**, climb to 12000 via heading 166° and FBR VOR/DME R-330 to FBR VOR/DME before proceeding on course. **Rwy 34**, climb via heading 346° to 8200 then climbing right turn to 12000 via heading 125° and FBR VOR/DME R-345 to FBR VOR/DME before proceeding on course.**KLAMATH FALLS, OR**

KLAMATH FALLS (LMT)

AMDT 5 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, NA - Terrain. **Rwy 14**, std. w/ min. climb of 300' per NM to 7100, or 3100 - 3 for climb in visual conditions. **Rwy 25**, std. w/ min. climb of 400' per NM to 7100, or 3100 - 3 for climb in visual conditions. **Rwy 32**, std. w/ min. climb of 350' per NM to 7100, or 3100 - 3 for climb in visual conditions.DEPARTURE PROCEDURE: **Rwy 14**, climb heading 141° to 6500 then climbing right turn to intercept LMT R-181 to LMT VORTAC, thence... or for climb in visual conditions: cross Klamath Falls airport at or above 7000 direct LMT VORTAC, thence... **Rwy 25**, climb heading 253° to 6000 then climbing right turn to intercept LMT R-306 to LMT VORTAC, thence... or for climb in visual conditions: cross Klamath Falls airport at or above 7000 direct LMT VORTAC, thence... **Rwy 32**, climb heading 321° to 6700 then climbing left turn to intercept LMT R-277 to LMT VORTAC, thence... or for climb in visual conditions: cross Klamath Falls airport at or above 7000 direct LMT VORTAC, thence...

...continue climb in LMT VORTAC holding pattern (West, Right Turns, 070° inbound) to cross LMT VORTAC at or above MEA for route of flight.

NOTE: **Rwy 14**, trees 3108' from DER, 1240' left of centerline, 100' AGL/4183' MSL. **Rwy 25**, terrain and trees beginning 597' from DER, 420' left of centerline, up to 100' AGL/4499' MSL. Vehicles on road and railroad beginning 254' from DER, 127' left of centerline, up to 23' AGL/4113' MSL. **Rwy 32**, multiple trees beginning 2625' from DER, 742' left of centerline, up to 100' AGL/4191' MSL.

## LA GRANDE, OR

## LA GRANDE/UNION COUNTY

TAKE-OFF MINIMUMS: **Rwy 12**, Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 4500-3 or std. with a min. climb of 500' per NM to 7800. **Rwy 30**, Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 3600-3 or std. with a min. climb of 450' per NM to 6800. **Rwy 34**, 2900-3 or std. with a min. climb of 350' per NM to 6100. **Rwy 16**, 2000-3 or std. with a min. climb of 500' per NM to 5000. DEPARTURE PROCEDURE: **Rwy 12, 16**, climbing left turn direct LGD NDB, thence; **Rwys 30, 34**, climbing right turn heading 010°, thence; **all aircraft** climb to 7000 via the 339° bearing from LGD NDB, then climbing right turn direct LGD NDB.

## LAKEVIEW, OR

## LAKE COUNTY

TAKE-OFF MINIMUMS: **Rwy 16**, 3700-5 or std. with a min. climb of 320' per NM to 8800. **Rwy 34**, 2500-5 or std. with a min. climb of 320' per NM to 8500. DEPARTURE PROCEDURE: **Rwy 16**, climbing right turn via LKV R-163 to LKV VORTAC. **Rwy 34**, climbing left turn heading 320° to intercept LKV R-148 then via LKV R-148 to LKV VORTAC. **All aircraft** continue climbing in the LKV VORTAC holding pattern (NW, right turns, 148° inbound) to MEA for route of flight.

## LARAMIE, WY

## LARAMIE RGNL

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwys 12, 21**, turn right. **All aircraft** climb direct LAR VORTAC, continue climb in holding pattern (W, left turns, 107° inbound) to cross LAR VORTAC at or above: westbound V4, 10600. All others cross LAR VORTAC at or above MEA for direction of flight.

## LAUREL, MT

## LAUREL MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 14, 27, 32**, NA. DEPARTURE PROCEDURE: **Rwy 22**, turn left. **All aircraft** climb direct BIL VORTAC.

## LEWISTON, ID

## LEWISTON-NEZ PERCE COUNTY (LWS)

## AMDT 3A 10182 (FAA)

DEPARTURE PROCEDURE: **Rwys 8, 12, 26, 30**, turn left direct MQG VOR/DME. Continue climb in holding pattern (W, left turns, 066° inbound) to cross MQG VOR/DME at or above 3600.

## LEWISTOWN, MT

## LEWISTOWN MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, 1800-2 or std. with a min. climb of 280' per NM to 6900. **Rwy 7, 12**, 900-2 or std. with a min. climb of 220' per NM to 6200. DEPARTURE PROCEDURE: **Rwys 2, 30** turn left. **Rwys 7, 12, 20**, turn right. **Rwy 25**, climb runway heading. **All aircraft** climb direct LWT VORTAC. Continue climb in holding pattern (W, right turns, 094° inbound) to MEA for route of flight.

## LEXINGTON, OR

## LEXINGTON

TAKE-OFF MINIMUMS: **Rwy 26**, std. with min. climb of 280' per NM to 7600, or 1600-2 ½ for climb in visual conditions. **Rwy 8**, std. with min. climb of 490' per NM to 4200, or 1600-2 ½ for climb in visual conditions. DEPARTURE PROCEDURE: **Rwys 8, 26**, for climb in visual conditions: cross Lexington Airport at or above 3600. NOTES: **Rwy 8**, trees 1.42 NM from departure end of runway, 2386' left of centerline, 100' AGL/2159' MSL. Trees 1.48 NM from departure end of runway, 2755' left of centerline, 100' AGL/2179' MSL.

## LIBBY, MT

## LIBBY

TAKE-OFF MINIMUMS: **Rwy 33**, not authorized. **Rwy 15**, use EYEESE RNAV DEPARTURE.

## LIVINGSTON, MT

## MISSION FIELD (LVM)

## AMDT 3 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 13, 26, 31**, NA-Environmental. DEPARTURE PROCEDURE: **Rwys 4, 22**, use LIVINGSTON DEPARTURE.

## MADRAS, OR

## MADRAS MUNI (S33)

## AMDT 1 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwys 16, 22**, std. with a min. climb of 298' per NM to 3900 or 1300-3 for climb in visual conditions. DEPARTURE PROCEDURE: **Rwys 4, 34**, climbing left turn heading 210° to intercept DSD R-348 to DSD VORTAC, thence... **Rwy 16**, climbing right turn heading 210° to intercept DSD R-348 to DSD VORTAC, thence... , or for climb in visual conditions: cross Madras Muni airport at or above 3600 MSL, then proceed on DSD R-356 to DSD VORTAC, thence... **Rwy 22**, climb heading 216° to intercept DSD R-348 to DSD VORTAC, thence... , or for climb in visual conditions: cross Madras Muni airport at or above 3600 MSL, then proceed on DSD R-356 to DSD VORTAC, thence... ...continue climb-in-hold (hold North, right turns, 168° inbound) to MEA/MCA for route of flight. NOTE: **Rwy 4**, vehicle on road beginning 7' from DER, 268' left of centerline, up to 15' AGL/2444' MSL. Airplane on tarmac 60' from DER, 252' right of centerline, 40' AGL/2469' MSL. Bush 383' from DER, 483' right of centerline, 19' AGL/2439' MSL. Vehicle on road 742' from DER, 112' right of centerline, up to 15' AGL/2447' MSL. **Rwy 16**, bushes beginning 196' from DER, 151' left of centerline, up to 14' AGL/2444' MSL. Airplane on tarmac 1357' from DER, 280' right of centerline 40' AGL/2479' MSL. **Rwy 34**, bushes beginning 92' from DER, 116' right of centerline, up to 17' AGL/2437' MSL. Airplane on tarmac 1396' from DER, 375' left of centerline, 40' AGL/2469' MSL.

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## MC CALL, ID

MC CALL MUNI (MYL)

AMDT 2 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 16**, use MCCALL DEPARTURE.

## MC CHORD FIELD (KTCM)

TACOMA, WA . . . . . 10154

DEPARTURE PROCEDURE: **Rwy 16**, Track heading 160°, turn left to intercept SEA VORTAC R-168 (V495) to SEA 168/37.1 DME (ALDER). Cross ALDER at or above 4000. After ALDER, maintain MEA/MOCA for route of flight. **Rwy 34**, Track heading 340°, then turn right to intercept SEA VORTAC R-168 (V495) to SEA R-168/37.1 DME (ALDER). Cross ALDER at or above 4000. Maintain MEA/MOCA for route of flight.

TAKEOFF OBSTACLES: **Rwy 16**, Grove of trees 143' AGL/454' MSL, 4892' from DER, 1353' left of centerline. Grove of trees 102' AGL/419' MSL, 2395' from DER, 1028' right of centerline. Trees 136' AGL/447' MSL, 2867' from DER, 1261' left of centerline. Trees 120' AGL/430' MSL, 2594' from DER, 1113' left of centerline. Trees 85' AGL/394' MSL, 2310' from DER, 957' left of centerline. Trees 83' AGL/392' MSL, 2006' from DER, 959' left of centerline. Trees 87' AGL/389' MSL, 1758' from DER, 971' left of centerline. **Rwy 34**, Tree 106' AGL/348' MSL, 2307' from DER, 1038' left of centerline. Tree 121' AGL/370' MSL, 3190' from DER, 526' right of centerline. Aircraft 65' AGL/317' MSL, 186' from DER, 407' left of centerline. Tree 64' AGL/343' MSL, 2260' from DER, 1036' left of centerline. Building 40' AGL/321' MSL, 1668' from DER, 810' left of centerline.

## MC MINNVILLE, OR

MC MINNVILLE MUNI (MMV)

AMDT 4 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 400-1¼ or std. w/min.

climb of 238' per NM to 400, or alternatively, with standard take-off minimums and normal 200'/NM climb gradient, take-off must occur no later than 2000' prior to departure end of runway. **Rwy 17**, std. w/min. climb of 300' per NM to 1200 or 1800-2½ for climb in visual conditions. **Rwy 22**, std. w/min. climb of 303' per NM to 1400 or 1800-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4**, climb heading 038° to intercept UBG R-170 to UBG VOR/DME, thence ...

**Rwy 17,22**, climbing left turn to intercept UBG R-183 to UBG VOR/DME, thence ... or for climb in visual conditions: cross Mc Minnville Muni at or above 1800 before proceeding on course. **Rwy 35**, climb heading 347° to intercept UBG R-221 to UBG VOR/DME, thence...

... continue climb in UBG VOR/DME holding pattern (S, left turns, 003° inbound) until reaching MEA for route of flight.

NOTE: **Rwy 4**, multiple trees beginning 2040' from departure end of runway, 353' left and 209' right of centerline, up to 100' AGL/339 feet MSL. **Rwy 17**, tree 1719' from departure end of runway, 456' right of centerline, 100' AGL/231' MSL. Tree 1760' from departure end of runway, 627' left of centerline, 100' AGL/257' MSL. **Rwy 22**, multiple trees beginning 282' from departure end of runway, 120' left and 144' right of centerline, up to 100' AGL/246' MSL. Tree 4047' from departure end of runway, 1319' left of centerline, 100' AGL/284' MSL. **Rwy 35**, multiple trees beginning 1551' from departure end of runway, 229' right of centerline, up to 100' AGL/277' MSL.

## MEDFORD, OR

ROGUE VALLEY INTL-MEDFORD (MFR)

AMDT 9A 10182 (FAA)

TAKE-OFF MINIMUMS: **Rwys 10,28**, NA-Obstacles.

**Rwy 14**, std. w/min. climb of 430' per NM to 4600, or 2900-3 for climb in visual conditions. **Rwy 32**, std. with a min. climb of 260' per NM to 6800, or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14**, climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

**Rwy 32**, climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

...all aircraft climb in OED VORTAC holding pattern (hold NW, right turns, 153° inbound) to cross OED VORTAC at or above 6400.

## MISSOULA, MT

MISSOULA INTL (MSO)

AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,25**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwys 11,29**, use GRZLY DEPARTURE.



## MOSES LAKE, WA

### GRANT COUNTY INTL

NOTE: **Rwy 14R**, antenna 3902' from departure end of runway, 828' right of centerline, 98' AGL/1268' MSL.

**Rwy 18**, pole 405' from departure end of runway, 334' right of centerline, 30' AGL/1209' MSL. Windsock 496' from departure end of runway, 371' left of centerline, 16' AGL/1195' MSL. **Rwy 32L**, pole 1326' from departure end of runway, 373' left of centerline, 22' AGL/1202' MSL.

## MOUNTAIN HOME AFB (KMUO)

### MOUNTAIN HOME, ID . . . . . 07270

**Rwy 12, 30, 6700-3\***

\*Or standard with minimum climb of 270/NM to 9100.

TAKE-OFF OBSTACLES: **Rwy 12**, Terrain 0' AGL/3028' MSL, 1224' from DER, 744' right of centerline. Terrain 0' AGL/3035' MSL, 824' from DER, 721' right of centerline. Terrain 0' AGL/3035' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3022' MSL, 49' from DER, 202' right of centerline. Terrain 0' AGL/3018' MSL, 148' from DER, 328' left of centerline. Terrain 0' AGL/3016' MSL, 300' from DER, 580' left of centerline. Road/Vehicle 15' AGL/3044' MSL, 1147' from DER, 794' right of centerline. Power pole 35' AGL/3069' MSL, 2914' from DER, 940' right of centerline. Tower 30' AGL/3032' MSL, 1067' from DER, 902' right of centerline. Tower 28' AGL/3039' MSL, 1172' from DER, 796' right of centerline. Tower 45' AGL/3054' MSL, 2152' from DER, 1478' left of centerline. **Rwy 30**, Terrain 0' AGL/2995' MSL, 40' from DER, 492' left of centerline. Terrain 0' AGL/2999' MSL, 370' from DER, 467' right of centerline. Terrain 0' AGL/3006' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3007' MSL, 570' from DER, 653' right of centerline. Road/Vehicle 35' AGL/3019' MSL, 954' from DER, 773' left of centerline.

## MOUNTAIN HOME, ID

### MOUNTAIN HOME MUNI

TAKE-OFF MINIMUMS: **Rwy 10**, 3500-2 or std. with a min. climb of 305' per NM to 7300. **Rwy 28**, 3500-2 or std. with a min. climb of 290' per NM to 7300.

DEPARTURE PROCEDURE: **Rwy 10**, climbing left turn direct STI NDB. **Rwy 28**, climbing right turn direct STI NDB. **All aircraft** departing STI NDB bearing 080° CW 340° climb on course. All others continue climb in hold (E, left turns, 271° inbound) to cross STI NDB at or above 7300.

## NAMPA, ID

### NAMPA MUNI

DEPARTURE PROCEDURE: **Rwy 11**, climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course. **Rwy 29**, climb runway heading to 3700 then climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course.

NOTE: **Rwy 11**, 70' AGL tree, 1225' from departure end of runway, 90' right of centerline.

## NEWCASTLE, WY

### MONDELL FIELD (ECS)

AMDT 3A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 17, 23, 35**, NA. **Rwy 13**, 200-1 or std. with a min. climb of 275' per NM to 4400.

**Rwy 31**, 300-1 or std. with a min. climb of 300' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 31**, climbing left turn.

**All aircraft** climb to 5500 via ECS R-143, then climbing right turn direct ECS VOR, continue climb on course.

NOTE: **Rwy 13**, fence posts, beginning 299' from DER, 218' left of centerline, up to 10' AGL/4190' MSL. Light on antenna 1951' from DER, 879' left of centerline, 84' AGL/4244' MSL. **Rwy 31**, multiple poles, beginning 74' from DER, 237' right of centerline, up to 20' AGL/4200' MSL. Bush 5787' from DER, 1441' right of centerline, 13' MSL/4363' MSL. Railroad 735' from DER, 314' right of centerline 30' AGL/4202' MSL. Road 207' from DER, 254' right of centerline, 15' AGL/4187' MSL.

## NEWPORT, OR

### NEWPORT MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, NA. **Rwy 16**, 500-2 or std. with a min. climb of 310' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 2**, NA. **Rwy 16**, turn right. **Rwy 34**, turn left. Aircraft departing via ONP R-180 CW R-320 depart on course. All others continue climbing via ONP R-200 to 1500 then climbing left turn direct ONP VORTAC. Cross ONP VORTAC at or above 2200.

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## NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)

AMDT 5 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, std. with a min. climb of 475' per NM to 1200 or 900-3 with a min. climb of 300' per NM to 900 or 1600-2½ for climb in visual conditions.

**Rwy 13**, 400-2½ with a min. climb of 250' per NM to 2500 or 1600-2½ for climb in visual conditions. **Rwy 31**, 300-1½ or std. with a min. climb of 280' per NM to 300.

DEPARTURE PROCEDURE: **Rwy 4**, climb heading 043° to intercept OTH VORTAC R-337 northward bound to 1800 before proceeding on course, or for climb in visual conditions cross Southwest Oregon Rgnl airport at or above 1500 before proceeding on course. **Rwy 13**, climb heading 132° to 1300 before proceeding on course, or for climb in visual conditions cross Southwest Oregon Rgnl airport at or above 1500 before proceeding on course. **Rwy 22**, climb heading 223° to 700 before proceeding on course. **Rwy 31**, climb heading 312° to 800 before proceeding on course.

NOTE: **Rwy 4**, Obstruction light on antenna 383' from DER, 207' right of centerline, 22' AGL/35' MSL. Ship 1000' from DER, on centerline, up to 140' MSL. Obstruction lights on bridge beginning 1886' from DER, 621' left of centerline, up to 93' AGL/93' MSL. Bridge beginning 4728' from DER, 580' right of centerline, 265' AGL/265' MSL. Obstruction lights on bridge beginning 4741' from DER, 948' right of centerline, up to 268' AGL/268' MSL. Transmission tower 5031' from DER, 677' right of centerline, 213' AGL/216' MSL. Trees beginning 1.2 NM from DER, 409' left of centerline, up to 150' AGL/549' MSL. Trees beginning 1.5 NM from DER, 1396' right of centerline, up to 150' AGL/629' MSL. Buildings beginning 1.7 NM from DER, 776' left of centerline, up to 73' AGL/393' MSL. **Rwy 13**, bushes beginning 38' from DER, 175' left of centerline, up to 16' AGL/33' MSL. Vehicle on road, 193' from DER, 237' left of centerline, up to 15' AGL/30' MSL. Bush 193' from DER, 145' right of centerline, up to 20' AGL/37' MSL. Trees beginning 346' from DER, 17' right of centerline, up to 150' AGL/349' MSL. Buildings beginning 504' from DER, 243' right of centerline, up to 86' AGL/106' MSL. Trees beginning 628' from DER, 6' left of centerline, up to 150' AGL/298' MSL. Antenna on building 712' from DER, 554' right of centerline, up to 51' AGL/68' MSL. Poles beginning 880' from DER, 13' right of centerline, up to 136' AGL/236' MSL. Spire 3467' from DER, 1122' left of centerline, 55' AGL/243' MSL. Pole 1.0 NM from DER, 159' left of centerline, up to 121' AGL/221' MSL. **Rwy 22**, ship 4050' from DER, on centerline, up to 140' MSL. **Rwy 31**, ship 1000' from DER, on centerline, up to 140' MSL. Trees beginning 5037' from DER, 15' left of centerline, up to 92' AGL/232' MSL. Trees beginning 5985' from DER, 1419' right of centerline, up to 108' AGL/188' MSL.

## OAK HARBOR, WA

A J EISENBERG (OKH)

ORIG-A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, 300-1. **Rwy 25**, 300-1 DEPARTURE PROCEDURE: **Rwy 7**, climb via heading 071° to 2000, then climbing right turn direct CVV VOR/DME. Continue climb on course. **Rwy 25**, climb via heading 251° to 2100, then climbing left turn direct CVV VOR/DME. Continue climb on course.

NOTE: **Rwy 7**, multiple trees beginning 1167' from DER, 212' left of centerline, up to 80' AGL/319' MSL. Multiple trees beginning 664' from DER, 208' right of centerline, up to 80' AGL/299' MSL. Fence 612' from DER, right and left of centerline, 10' AGL/229' MSL. Multiple bushes beginning 240' from DER, 64' left of centerline, up to 8' AGL/227' MSL. **Rwy 25**, cars on road 87' from DER, left and right of centerline, up to 15' AGL/174' MSL. Multiple trees beginning 2271' from DER, right and left of centerline, up to 80' AGL/279' MSL.

## OLYMPIA, WA

OLYMPIA RGNL (OLM)

AMDT 5A 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2 or std. with a min. climb of 706' per NM to 600, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8**, climb heading 085° to 1000 then climbing left turn direct OLM VORTAC, thence... **Rwy 17**, climb heading 172° to 1200 then climbing right turn direct OLM VORTAC, thence... or climb in visual conditions to cross OLM VORTAC at or above 2300, thence... **Rwy 26,35**, climbing right turn direct OLM VORTAC, thence...  
...continue climb in OLM VORTAC holding pattern (south, right turn, 356° inbound) to cross OLM VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8**, multiple trees beginning 880' from DER, 214' left of centerline, up to 100' AGL/343' MSL. Multiple trees beginning 1636' from DER, 131' right of centerline, up to 100' AGL/320' MSL. **Rwy 17**, multiple trees beginning 1008' from DER, 24' left of centerline, up to 100' AGL/490' MSL. Multiple trees beginning 752' from DER, 3' right of centerline, up to 100' AGL/370' MSL. **Rwy 26**, multiple trees and WSK on building beginning 475' from DER, 595' left of centerline, up to 100' AGL/330' MSL. Multiple trees beginning 338' from DER, 339' right of centerline, up to 100' AGL/309' MSL. **Rwy 35**, multiple trees beginning 2176' from DER, 198' left of centerline, up to 100' AGL/313' MSL. Multiple trees and field light on hangar beginning 657' from DER, 621' right of centerline, up to 100' AGL/315' MSL.

## OMAK, WA

OMAK

TAKE-OFF MINIMUMS: **Rwy 17**, 2200-2 or std. with a min. climb of 300' per NM to 4200. **Rwy 35**, NA.

DEPARTURE PROCEDURE: **Rwy 17**, use GETNG RNAV DEPARTURE. **Rwy 35**, NA.





**ONTARIO, OR**

ONTARIO MUNI (ONO)

AMDT 3 08325 (FAA)

DEPARTURE PROCEDURE: **Rwy 32**, climb to 9600 on a heading between 010° CW to 141° from departure end of runway or minimum climb of 280' per NM to 9600 for all other courses.

NOTE: **Rwy 14**, multiple trees, poles, and buildings beginning 90' from departure end of runway, 157' right of centerline up to 120' AGL/2314' MSL. Multiple trees, poles, and buildings beginning 502' from departure end of runway, 506' left of centerline up to 120' AGL/2314' MSL. **Rwy 32**, multiple trees, poles, and buildings beginning 340' from departure end of runway, 405' left of centerline up to 100' AGL/2458' MSL. Multiple trees, poles, and buildings beginning 2' from departure end of runway, 472' right of centerline up to 100' AGL/2431' MSL.

**PASCO, WA**

TRI-CITIES

DEPARTURE PROCEDURE: **All runways**, climb runway heading to 1000, thence... **Rwy 12**, turn left. All others turn right. **All aircraft** climb direct PSC VOR/DME before proceeding on course.

**PENDLETON, OR**

EASTERN OREGON RGNL AT PENDLETON (PDT)

AMDT 3 09183 (FAA)

DEPARTURE PROCEDURE: **Rwys 7, 29, 34**, climbing left turn direct PDT VORTAC, thence...

**Rwys 11, 16**, climbing right turn direct PDT VORTAC, thence...

**Rwy 25**, climb direct PDT VORTAC, thence...

...continue climb in PDT VORTAC holding pattern (West, left turn, 073° inbound) to cross PDT VORTAC at or above MEA before proceeding on course.

NOTE: **Rwy 16**, multiple trees beginning 232' from DER, 348' right of centerline, up to 100' AGL/1579' MSL.

**Rwy 25**, multiple antennas and terrain beginning 203' from DER, 259' left of centerline, up to 13' AGL/1512' MSL. **Rwy 29**, terrain 189' from DER, 247' left of centerline, 1493' MSL.

**PINEDALE, WY**

PINEDALE/RALPH WENZ FIELD (PNA)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29**, std. with a min. climb of 310' per NM to 8300, or 4900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 11**, climbing right turn to 10000 via heading 190° and BPI R-040 to BPI VOR/DME before proceeding on course. **Rwy 29**, climbing left turn to 10000 via heading 230° and BPI R-020 to BPI VOR/DME before proceeding on course or for climb in visual conditions: cross Pinedale/Ralph Wenz Field at or above 11800 before proceeding on course.

**PLENTYWOOD, MT**

SHER-WOOD

NOTE: **Rwy 12**, multiple bushes beginning 47' from departure end of runway, 71' left of centerline, up to 12' AGL/2251' MSL. Multiple bushes beginning 362' from departure end of runway, 514' right of centerline, up to 12' AGL/2251' MSL. **Rwy 30**, multiple bushes and road beginning 68' from departure end of runway, 75' right of centerline, up to 12' AGL/2303' MSL. Multiple bushes beginning 217' from departure end of runway, 60' left of centerline, up to 12' AGL/2296' MSL.

**POCATELLO, ID**

POCATELLO RGNL (PIH)

AMDT 7 09351 (FAA)

DEPARTURE PROCEDURE: use KNURL ONE DEPARTURE.

**POLSON, MT**

POLSON

TAKE-OFF MINIMUMS: **Rwy 18**, N/A-extremely precipitous terrain. **Rwy 36**, standard with a min. climb of 270' per NM to 8400'.

DEPARTURE PROCEDURE: **Rwy 36**, Use ANGL RNAV DEPARTURE.

NOTES: **Rwy 36**, Road 509' from departure end of runway, 2955' MSL. Trees 2.39 NM from departure end of runway, 3383' left of centerline, 100' AGL/3179 MSL. Rapidly rising precipitous terrain left and right of centerline running along southern Flathead River ridges.

**POPLAR, MT**

POPLAR MUNI (PO1)

ORIG 10266 (FAA)

NOTE: **Rwy 9**, trees beginning 418' from DER, 502' left of centerline, up to 40' AGL/2079' MSL. Trees beginning 1421' from DER, 272' right of centerline, up to 40' AGL/2079' MSL.

**PORT ANGELES, WA**

PORT ANGELES CGAS

DEPARTURE PROCEDURE: Copter departure, climb from landing area direct to EDIZ HOOK NDB. Continue climb in holding pattern (NE, right turns, 237° inbound) to MEA for direction of flight.

**WILLIAM R FAIRCHILD INTL**

DEPARTURE PROCEDURE: **Rwys 8, 13, 26, 31**, use WATTR FIVE DEPARTURE.

21 OCT 2010 to 18 NOV 2010

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# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



## PORTLAND, OR

PORTLAND INTL (PDX)

AMDT 7 10266 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3**, 500-3 or std. w/ min. climb of 355' per NM to 700. **Rwy 10L**, std. w/ min. climb of 280' per NM to 2900. **Rwy 10R**, std. w/ min. climb of 265' per NM to 2900. **Rwy 21**, std. w/ min. climb of 290' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 3**, climb heading 025° to 700, then climbing left turn direct BTG VORTAC, thence ... **Rwys 10L, 10R**, climb heading 099° to 500, then climbing left turn direct BTG VORTAC, thence ...

**Rwy 21**, climb heading 205° to 500, then climbing right turn direct BTG VORTAC, thence ... **Rwys 28L, 28R**, climb heading 279° to 500, then climbing right turn direct BTG VORTAC, thence ...

... continue climb in BTG VORTAC holding pattern (hold NW, right turns, 149° inbound) to cross BTG VORTAC at or above MCA/MEA before proceeding on course.

NOTE: **Rwy 3**, trees, towers, vehicles on road, sign, beginning 1' from DER, on centerline, up to 173' AGL/ 463' MSL. Trees, vehicles on road, electrical system, building, beginning 1675' from DER, on centerline, up to 113' AGL/413' MSL. **Rwy 10L**, vehicles on road beginning at DER, 376' left of centerline, up to 15' AGL/ 78' MSL. Trees beginning 1201' from DER, 753' right of centerline, up to 75' AGL/95' MSL. **Rwy 10R**, pole 1996' from DER, 759' right of centerline, 54' AGL/74' MSL. **Rwy 21**, trees, poles, obstruction light on DME beginning 354' from DER, 1' left of centerline, up to 100' AGL/328' MSL. Trees, poles, beginning 1098' from DER, 42' right of centerline, up to 100' AGL/329' MSL.

**Rwy 28L**, trees 1873' from DER, 837' left of centerline, up to 75' AGL/95' MSL. **Rwy 28R**, building, antennas, vehicles on road, beginning 130' from DER, 257' right of centerline, up to 27' AGL/58' MSL.

## PORTLAND-HILLSBORO (HIO)

AMDT 6 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2**, std. w/ min. climb of 215' per NM to 1900 or 1200-3 for climb in visual conditions. **Rwy 30**, std. w/ min. climb of 235' per NM to 2700 or 1200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12**, climbing right turn direct UBG VOR/DME ... **Rwy 20**, climbing left turn direct UBG VOR/DME ... **Rwys 2**, climbing left turn direct UBG VOR/DME, or for climb in visual conditions cross Portland-Hillsboro airport at or above 1600 then proceed direct UBG VOR/DME ...

... all aircraft climb in UBG VOR/DME holding pattern (West, right turns, 108° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

NOTE: **Rwy 2**, vehicle on road 247' from DER, 1' right of centerline, up to 15' AGL/220' MSL. Terrain left and right of centerline beginning at DER up to 302' MSL. **Rwy 12**, terrain left and right of centerline beginning at DER up to 296' MSL. Trees 1836' from DER, 8' left of centerline, up to 125' AGL/331' MSL. **Rwy 20**, terrain left and right of centerline beginning at DER up to 306' MSL. Trees and hangers beginning 60' from DER, 32' left of centerline, up to 93' AGL/311' MSL. Trees, antennas and buildings beginning 564' from DER, 411' right of centerline, up to 74' AGL/280' MSL. **Rwy 30**, terrain left and right of centerline beginning at DER up to 292' MSL. Trees beginning 1664' from DER, 626' right of centerline, up to 194' AGL/363' MSL.

## PORTLAND, OR (CON'T)

PORTLAND-TROUTDALE

TAKE-OFF MINIMUMS: **Rwy 7**, 3600-2 or std. with a min. climb of 380' per NM to 4100. **Rwy 25**, 900-2 or std. with a min. climb of 360' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 7**, turn left.

**Rwy 25**, turn right. All aircraft climb via BTGR-125 direct BTG VORTAC. Continue climb on BTGR-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CWR-055 or R-085 CWR-115 5000; all others 2500.

## POWELL, WY

POWELL MUNI (POY)

AMDT 1A 10238 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 16, 21, 34**, NA.

DEPARTURE PROCEDURE: **Rwy 13**, turn right. **Rwy 31**, turn left. All aircraft climb direct COD VOR/DME. Aircraft departing COD R-350 CW R-170 climb on course. All others continue climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above 9400.

NOTE: **Rwy 13**, terrain beginning 564' from DER, 362' right of centerline, up to 5122' MSL. Windsock 12' from DER, 287' right of centerline, up to 13' AGL/5104' MSL. Road 414' from DER, 53' right of centerline, up to 15' AGL/5113' MSL. **Rwy 31**, windsock 5' from DER, 298' right of centerline, up to 8' AGL/5002' MSL.

## PRINEVILLE, OR

PRINEVILLE (S39)

AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, std. w/ min. climb of 350 feet per NM to 6500, or 2400-3 for climb in visual conditions. **Rwy 15**, std. w/ min. climb of 470' per NM to 6200, or 2400-3 for climb in visual conditions. **Rwy 28**, std. w/ min. climb of 450' per NM to 6700, or 2400-3 for climb in visual conditions. **Rwy 33**, std. w/ min. climb of 380' per NM to 6700, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 102° to 6500 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 15**, climb heading 154° to 6200 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 28**, climb heading 282° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 33**, climb heading 334° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course.

NOTE: **Rwy 10**, trees beginning 2693' from departure end of runway, 545' right of centerline, up to 100' AGL/3339' MSL. **Rwy 15**, trees beginning 1129' from departure end of runway, 697' right of centerline, up to 100' AGL/3319' MSL. **Rwy 28**, trees beginning 1803' from departure end of runway, 74' right of centerline, up to 100' AGL/3319' MSL. **Rwy 33**, trees beginning 2636' from departure end of runway, 379' right of centerline, up to 100' AGL/3319' MSL.





## PULLMAN-MOSCOW, WA

### PULLMAN-MOSCOW RGNL

TAKE-OFF MINIMUMS: **Rwy 5**, 300-1¼ with a min. climb of 278' per NM to 4400, or 4600-3 for climb in visual conditions. **Rwy 23**, 300-1 or std. with a min. climb of 361' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 5**, climbing left turn direct PUW VOR/DME, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight, or for climb in visual conditions; cross Pullman-Moscow Rgnl at or above 4500. **Rwy 23**, climbing left turn via PUW VOR/DME R-021, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

NOTE: **Rwy 5**, multiple trees and terrain left and right of centerline, beginning 614' from departure end of runway, 424' right of centerline up to 50' AGL/2677' MSL. Terrain 3503' from departure end of runway, 770' left of centerline, 50' AGL/2608' MSL. **Rwy 23**, multiple trees, terrain, fences, poles, and tanks beginning 669' from departure end of runway, 412' right of centerline, up to 52' AGL/2769' MSL.

## PUYALLUP, WA

### PIERCE COUNTY-THUN FIELD (PLU)

#### AMDT 1A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16, 34**, 300-1.

DEPARTURE PROCEDURE: **Rwy 16**, climbing right turn. **Rwy 34**, climb runway heading. **All aircraft** climb via SEA R-158 to COTNY INT/SEA 18.1 DME. Continue in COTNY holding pattern (Hold S, left turns, 338° inbound) to depart COTNY at or above: 001° CW 090° 3500, 090° 3500, 091° CW 120° 10,400, 121° CW 170° 2700, 171° CW 360° 1500.

NOTE: **Rwy 16**, light pole 511' from DER, 567' right of centerline, 40' AGL/552' MSL. Multiple poles on building beginning 187' from DER, 416' left of centerline, up to 575' MSL. Multiple trees beginning 363' from DER, 656' left of centerline to 540' right of centerline, up to 662' MSL. Vehicles on road beginning 1149' from DER, 512' right of centerline, up to 15' AGL/582' MSL. Terrain beginning 1293' from DER, 529' left of centerline to 352' right of centerline, up to 581' MSL. Pipe 1520' from DER, 303' left of centerline, 574' MSL. **Rwy 34**, multiple trees beginning 58' from DER, 591' left of centerline to 1029' right of centerline, up to 694' MSL. Flagpole 1155' from DER, 464' left of centerline, 578' MSL. Building 564' from DER, 410' left of centerline, 555' MSL.

## RAWLINS, WY

### RAWLINS MUNI/HARVEY FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, 600-2 or std. with a min. climb of 440' per NM to 7500. **Rwy 22**, 1500-2 or std. with a min climb of 365' per NM to 8700. **Rwys 10, 28**, NA.

DEPARTURE PROCEDURE: **Rwy 4**, turn right. **Rwy 22**, turn left. Climb to 10000 via RWL R-200 and CKW R-080 to CKW VOR/DME then via assigned route. Aircraft departing eastbound V4 or V6 climb via RWL R-200 to assigned route then climb on course.

## REDMOND, OR

### ROBERTS FIELD (RDM)

#### AMDT 5 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22**, std. w/ min. climb of 269' per NM to 4700. **Rwy 28**, std. w/ min. climb of 276' per NM to 4800.

DEPARTURE PROCEDURE: **Rwy 4**, climbing left turn via heading 265° and DSD R-047 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 10**, climbing right turn via heading 240° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 22**, climb heading 222° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 28**, climbing left turn via heading 275° and DSD R-045 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 28**, numerous trees beginning 1' from DER, 356' right of centerline, 12' AGL/3079' MSL. Tree 364' from DER, 448' left of centerline, 15' AGL/3054' MSL.

## RENTON, WA

### RENTON MUNI (RNT)

#### AMDT 7 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 405' per NM to 800, or 1100-2½ for climb in visual conditions. **Rwy 34**, 500-2¼ or std. with a min. climb of 315' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 16**, climb heading 157° to 700, then climbing right turn direct SEA VORTAC, thence..., or for climb in visual conditions: cross Renton Muni Airport westbound at or above 1000 MSL, then proceed on SEA R-029 to SEA VORTAC, thence... **Rwy 34**, Climb heading 337° to 700, then climbing left turn direct SEA VORTAC thence... Climb in SEA VORTAC holding pattern (East, left turns, 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight.

NOTES: **Rwy 16**, trees, towers, lights and blast shield beginning 185' from DER, 4' left of centerline, up to 100' AGL/574' MSL. Trees, lights and sign beginning 40' from DER, 54' right of centerline, up to 100' AGL/297' MSL. **Rwy 34**, Trees and terrain beginning 1.6 NM from DER, 104' left of centerline, up to 100' AGL/485' MSL. Trees, terrain and wood piling beginning 75' from DER, 7' right of centerline, up to 100' AGL/426' MSL.

## REXBURG, ID

### REXBURG-MADISON COUNTY

DEPARTURE PROCEDURE: **Rwy 17**, climbing right turn. **Rwy 35**, climbing left turn. **All aircraft** climb via IDA VOR/DME R-015 to RIGBY Int to MEA for route of flight before proceeding on course.

NOTE: **Rwy 17**, 100' AGL trees 125' from departure end of runway, 350' left of centerline. **Rwy 35**, 100' AGL trees 350' from departure end of runway, 450' right of centerline. 100' AGL trees 750' from departure end of runway, 500' left of centerline.



**RICHLAND, WA**

RICHLAND (RLD)

AMDT 8 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwys 1, 8**, std. w/ min. climb of 310' per NM to 5000. **Rwy 19**, std. w/ min. climb of 480' per NM to 5000. **Rwy 26**, std. w/ min. climb of 350' per NM to 5000.

DEPARTURE PROCEDURE: **Rwys 1, 8**, climbing left turn heading 220° and PSC R-269 to 6000 to PAPPS INT /PSC 32.72 DME before proceeding on course.

**Rwy 19**, climbing right turn heading 310° and PSC R-269 to 6000 to PAPPS INT /PSC 32.72 DME before proceeding on course. **Rwy 26**, climb heading 310° and PSC R-269 to 6000 to PAPPS INT /PSC 32.72 DME before proceeding on course.

NOTE: **Rwy 1**, crane 4957' from DER, 1271' right of centerline, up to 120' AGL/520' MSL. Poles beginning 752' from DER, 446' right of centerline, up to 20' AGL/416' MSL. Trees beginning 43' from DER, 102' left of centerline, up to 25' AGL/424' MSL. Multiple trees 184' from DER, 162' right of centerline, up to 25' AGL/424' MSL. **Rwy 8**, railroad beginning 181' from DER, left to right of centerline, up to 23' AGL/412' MSL. Sign 23' from DER, 122' right of centerline, up to 4' AGL/391' MSL. Trees beginning 1142' from DER, 12' right of centerline, up to 25' AGL/454' MSL. Trees beginning 2240' from DER, 94' left of centerline, up to 25' AGL/456' MSL. **Rwy 19**, bushes beginning 22' from DER, 297' left of centerline, up to 7' AGL/401' MSL. Trees beginning 323' from DER, 478' right of centerline, up to 25' AGL/424' MSL. Trees beginning 665' from DER, 399' left of centerline, up to 25' AGL/472' MSL. **Rwy 26**, antenna 310' from DER, 444' right of centerline, up to 7' AGL/408' MSL. Fence 458' from DER, 360' left of centerline, up to 25' AGL/425' MSL. Fence 456' from DER, 408' right of centerline, up to 25' AGL/410' MSL. Post 398' from DER, 255' right of centerline, up to 9' AGL/409' MSL. Bush 755' from DER, 257' right of centerline, up to 17' AGL/417' MSL. Ground 480' from DER, 488' right of centerline, up to 421' MSL. Trees beginning 174' from DER, 231' right of centerline, up to 25' AGL/425' MSL. Trees beginning 184' from DER, 210' left of centerline, up to 25' AGL/457' MSL.

**RIVERTON, WY**

RIVERTON RGNL (RIW)

AMDT 1 10042 (FAA)

DEPARTURE PROCEDURE: **Rwys 1, 10, 19, 28**, climbing right turn direct RIW VOR/DME. **All Aircraft** climb in RIW holding pattern (hold East, right turns, 287° inbound) to MEA for direction of flight.

NOTES: **Rwy 1**, sage brush beginning 35' from DER, left and right of centerline, up to 3' AGL/5499' MSL. **Rwy 10**, sage brush beginning 20' from DER, left and right of centerline, up to 3' AGL/5466' MSL. **Rwy 19**, sage brush beginning 49' from DER, 171' right of centerline, up to 3' AGL/5479' MSL. Windstocks beginning 154' from DER, 268' right of centerline, up to 28' AGL/5468' MSL. **Rwy 28**, sage brush, tower, and pole beginning 54' from DER, 154' right of centerline, up to 59' AGL/5679' MSL. Sage brush, fence, and poles beginning 132' from DER, 27' left of centerline, up to 67' AGL/5647' MSL.

**ROCK SPRINGS, WY**

ROCK SPRINGS-SWEETWATER COUNTY (RKS)

AMDT 6 10098 (FAA)

DEPARTURE PROCEDURE: **Rwy 3**, climb heading 032° to 8000 then climbing left turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold East, right turns, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight. **Rwy 9**, climb heading 090° to 8200 then climbing left turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold East, right turns, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight. **Rwy 21**, climb heading 212° to 8400, then climbing right turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold East, right turns, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight. **Rwy 27**, climb heading 270° to 7900, then climbing right turn via OCS R-291 to OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold East, right turns, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight.

NOTE: **Rwy 3**, vehicle on road beginning 22' from DER, 120' left of centerline, up to 20' AGL/6760' MSL, bushes beginning 178' from DER, 517' right of centerline, up to 15' AGL/6755' MSL. **Rwy 21**, bush 53' from DER, 221' left of centerline, 15' AGL/6737' MSL.

**RONAN, MT**

RONAN (7S0)

ORIG 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. w/ min. climb of 260' per NM to 9900 or 6100-3 for climb in visual conditions. **Rwy 34**, std. w/ min. climb of 250' per NM to 9900 or 6100-3 in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16**, climb to 8800 on a heading between 177° CW to 336° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course. **Rwy 34**, climb to 8800 on a heading between 336° CCW to 177° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.

NOTE: **Rwy 16**, tree 485' from DER, 386' left of centerline 50' AGL/3149' MSL. **Rwy 34**, building 158' from DER, 370' left of centerline 40' AGL/3130' MSL. Tree 1358' from DER, 556' left of centerline 50' AGL/3149' MSL.

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## ROSEBURG, OR

ROSEBURG RGSL (RBG)

AMDT 5A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 642' per NM to 2000, or 1700-3 for climb in visual conditions. **Rwy 34**, std. with a min. climb of 760' per NM to 2000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16**, climb direct RBG VOR/DME, or climb in visual conditions to cross Roseburg Airport southbound at or above 2200, then direct RBG VOR/DME. Then via RBG R-157 and right turn direct RBG VOR/DME to cross at or above the MCA or MEA for route of flight. **Rwy 34**, climb via heading 342° to 4000, or climb in visual conditions to cross Roseburg Airport northbound at or above 2200 and then via heading 342° to 4000. Then climbing left turn direct RBG VOR/DME, to cross RBG VOR/DME at or above MCA or MEA for route of flight. Aircraft that have not reached the MCA or MEA for route of flight continue climb via RBG R-157 and right turn direct RBG VOR/DME.

NOTE: **Rwy 16**, tower 1.56 NM from departure end of runway, 2231' right of centerline, 50' AGL/1201' MSL, tree 1.47 NM from departure end of runway, 1560' right of centerline, 21' AGL/980' MSL, tree 1.46 NM from departure end of runway, 1298' right of runway centerline, 45' AGL/964' MSL, pole 1.36 NM from departure end of runway, 921' right of centerline, 75' AGL/914' MSL, rod on airway beacon 1.29 NM from departure end of runway, 409' right of centerline, 52' AGL/891' MSL, tree 655' from departure end of runway, 347' right of runway centerline, 93' AGL/593' MSL, obstruction light on pole 691' from departure end of runway, 187' right of runway centerline, 117' AGL/557' MSL. **Rwy 34**, tree 1.10 NM from departure end of runway, 2003' left of runway centerline, 60' AGL/1179' MSL. Tree 5165' from departure end of runway, 1744' left of centerline, 64' AGL/1023' MSL. Obstruction light on pole 4850' from departure end of runway, 56' left of centerline, 15' AGL/894' MSL. Tree 4785' from departure end of runway, 48' left of runway centerline, 23' AGL/862' MSL. Tree 1.41 NM from departure end of runway, 1826' left of runway centerline, 17' AGL/896' MSL. Tree 4079' from departure end of runway, 508' left of runway centerline, 21' AGL/780' MSL. Tree 5067' from departure end of runway, 265' right of centerline, 43' AGL/802' MSL. Tree 4260' from departure end of runway, 345' right of centerline, 42' AGL/761' MSL. Tree 1465' from departure end of runway 329' right of runway centerline, 100' AGL/642' MSL. Tree 913' from departure end of runway, 217' right of runway centerline, 100' AGL/622' MSL. Tree 647' from departure end of runway, 345' right of runway centerline, 100' AGL/615' MSL. Hill 1065' from departure end of runway, 299' right of runway centerline 608' MSL. Trees beginning 60' from departure end of runway, 117' left of runway centerline, up to 16' AGL/554' MSL. Trees beginning 242' from departure end of runway, 209' right of runway centerline, up to 56' AGL/584' MSL. Vehicle on road 265' from departure end of runway, 229' right of runway centerline, 15' AGL/560' MSL. Multiple signs beginning 792' from departure end of runway, 550' left of runway centerline, up to 60' AGL/565' MSL. Bush 94' from departure end of runway, 228' right of runway centerline, 19' AGL/547' MSL. Bush 202' from departure end of runway, 92' left of centerline, 7' AGL/535' MSL. Pole 640' from departure end of runway, 354' left of runway centerline, 29' AGL/557' MSL.

## SALEM, OR

MCNARY FIELD

TAKE-OFF MINIMUMS: **Rwy 13**, 600-2 or std. with a min. climb of 240' per NM to 800. **Rwy 16**, 600-2 or std. with a min. climb of 340' per NM to 800.

DEPARTURE PROCEDURE: Comply with SIDs or; **Rwys 31, 34**, turn right. **Rwy 16**, turn left. **Rwy 13**, climb heading 130°. **All aircraft** climb direct TURNLOM/Int. Continue climb in holding (SE, left turns, 310° inbound) to cross TURNLOM/INT at or above MEA for route of flight.

## SALMON, ID

LEMHI COUNTY

TAKE-OFF MINIMUMS: **Rwy 17**, NA. **Rwy 35**, 4300-5 or std. with a min. climb of 390' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 17**, NA. **Rwy 35**, climb runway heading to 8000, then climbing left turn to 11,300 direct LKT VOR/DME before proceeding on course.

## SANDPOINT, ID

SANDPOINT

TAKE-OFF MINIMUMS: **Rwy 1**, 4200-2 or std. with a min. climb of 520' per NM to 5800. **Rwy 19**, 2200-2 or std. with a min. climb of 480' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 1**, climbing right turn to COE VOR/DME via heading 200° and COE R-002.

**Rwy 19**, climbing left turn to COE VOR/DME via heading 140° and COE R-002.

## SARATOGA, WY

SHIVELY FIELD

TAKE-OFF MINIMUMS: **Rwy 23**, 400-1 or std. with a min. climb of 220' per NM to 7400.

DEPARTURE PROCEDURE: **Rwy 5**, turn left heading 280°. **Rwy 23**, turn right heading 340°. **All aircraft** climb to 9000 via 310° bearing from SAA NDB then continue climb on course.

## SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn direct BTG VORTAC. **Rwy 33**, climbing right turn direct BTG VORTAC. Aircraft departing BTG R-160 CW R-329 climbing left turn on course. All others climb in BTG VORTAC holding pattern (NW, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 15**, 158' MSL tree 470' from departure end of runway, 499' right of centerline. **Rwy 33**, cross departure end of runway 33 at or above 35' AGL/90' MSL. 130' MSL tree 613' from departure end of runway, 414' right of centerline; 142' MSL trees 1343' from departure end of runway, 348' right of centerline.

## SCOBEY, MT

SCOBEY

TAKE-OFF MINIMUMS: **Rwy 12**, std. with a min. climb of 280' per NM to 3400.





## SEATTLE, WA

## BOEING FIELD/KING COUNTY INTL

TAKE-OFF MINIMUMS: **Rwy 13L**, 500-3 w/ min. climb of 232' per NM to 800, or 1000-2½ for climb in visual conditions. **Rwy 13R**, std. w/ a min. climb of 476' per NM to 900, or 500-3 w/ a min. climb of 386' per NM to 900, or 1000-2½ for climb in visual conditions. **Rwy 31L**, std. w/ a min. climb of 386' per NM to 800, or 300-1½ w/ min. climb of 235' per NM to 800, or 1000-2½ for climb in visual conditions. **Rwy 31R**, std. w/ a min. climb of 334' per NM to 900, or 400-1½ w/ min. climb of 216' per NM to 900, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13L/R**, climbing right turn. **Rwys 31L/R**, climbing left turn. All aircraft climb direct to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000. For climb in visual conditions cross Boeing Field/King County Intl Airport at or above 900, then climb to 3000 via SEA R-344 to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000.

NOTES: **Rwy 13L**, multiple trees, towers, antennas and building beginning 402' from departure end of runway, 411' left of centerline, up to 127' AGL/479' MSL.

**Rwy 13R**, multiple trees and poles beginning 35' from departure end of runway, 154' left of centerline, up to 66' AGL/485' MSL. Multiple trees and poles beginning 501' from departure end of runway, 3' right of centerline, up to 77' AGL/195' MSL. **Rwy 31L**, multiple trees, fence, and building beginning 250' from departure end of runway, 253' left of centerline, up to 71' AGL/101' MSL. Multiple trees and floodlights beginning 1245' from departure end of runway, 447' right of centerline, up to 71' AGL/239' MSL. **Rwy 31R**, multiple trees, hangers, towers, poles and building beginning 12' from departure end of runway, 389' right of centerline, up to 103' AGL/350' MSL. Multiple obstruction lights beginning 214' from departure end of runway, 99' left of centerline, up to 71' AGL/101' MSL.

## SEATTLE-TACOMA INTL (SEA)

## AMDT 4 08325 (FAA)

DEPARTURE PROCEDURE: **Rwys 16L, 16C, 16R**, climb to 1000 via heading 163°, then climbing right turn direct SEA VORTAC, thence...

**Rwys 34L, 34C, 34R**, climb to 1000 via heading 343°, then climbing left turn direct SEA VORTAC, thence...  
...climb in SEA VORTAC holding pattern (hold SE, left turns, 310° inbound) to MEA/MCA for route of flight.

NOTE: **Rwy 16L**, trees beginning 2908' from departure end of runway, 1064' right of centerline, up to 100' AGL/476' MSL. **Rwy 16C**, trees beginning 4477' from departure end of runway, 484' right of centerline, up to 100' AGL/507' MSL. **Rwy 16R**, trees, antenna on building and light pole beginning 488' from departure end of runway, 436' left of centerline, up to 100' AGL/507' MSL. Trees beginning 1137' from departure end of runway, 587' right of centerline, up to 100' AGL/468' MSL. **Rwy 34L**, fence 189' from departure end of runway, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from departure end of runway, 857' left of centerline, up to 100' AGL/522' MSL.

## SHELBY, MT

## SHELBY

TAKE-OFF MINIMUMS: **Rwy 5**, 200-1¼ or std. w/ min. climb of 212' per NM to 3700, or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1300' prior to departure end of runway.

NOTE: **Rwy 5**, fence post 320' from departure end of runway, 162' right of centerline, 12' AGL/3455' MSL, truck on road beginning 515' from departure end of runway, 632' right of centerline, 17' AGL/3498' MSL, tree 1 NM from departure end of runway, 1242' left of centerline, 75' AGL/3604' MSL. **Rwy 11**, truck on road 906' from departure end of runway, 691' left of centerline, 17' AGL/3456' MSL, tree 1697' from departure end of runway, 26' right of centerline, 75' AGL/3495' MSL, tree 1561' from departure end of runway, 322' left of centerline, 75' AGL/3514' MSL, light standard 852' from departure end of runway, 174' left of centerline, 22' AGL/3451' MSL.

## SHELTON, WA

## SANDERSON FIELD

TAKE-OFF MINIMUMS: **Rwy 5**, std. w/ a min. climb of 312' per NM to 4000, or 1500-2½ for a climb in visual conditions. **Rwy 23**, std. w/ a min. climb of 414' per NM to 4000, or 1500-2½ for a climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5**, climbing right turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000. **Rwy 23**, climbing left turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.

NOTE: **Rwy 5**, multiple trees beginning 550' from departure end of runway, 107' left of centerline, up to 94' AGL/366' MSL. Multiple trees beginning 130' from departure end of runway, 70' right of centerline, up to 80' AGL/352' MSL. **Rwy 23**, multiple trees beginning 52' from departure end of runway, 149' left of centerline, up to 72' AGL/330' MSL. Multiple trees beginning 886' from departure end of runway, 153' right of centerline, up to 155' AGL/486' MSL.

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**SHERIDAN, WY****SHERIDAN COUNTY**TAKE-OFF MINIMUMS: **Rwy 5**, 700-3 or std. w/ min.

climb of 318' per NM to 5100, or... **Rwy 14**, 800-3 or std. w/ min. climb of 263' per NM to 5100, or... **Rwy 23**, 900-3 or std. w/ min. climb of 348' per NM to 5100, or...  
 ... 1400/3 for climb in visual conditions. Climb in visual conditions NA at night.

DEPARTURE PROCEDURE: **Rwy 5**, climbing left turn via SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence... **Rwy 14**, climbing left turn via heading 320° and SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence... **Rwy 23**, climbing right turn via SHR R-153 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence... **Rwy 32**, climb via heading 320° and SHR R-106 to SHR VORTAC, thence...  
 ... climb in holding pattern (hold northwest, left turn, 133° inbound) to cross SHR VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 5**, multiple trees beginning 101' from departure end of runway, 188' left of centerline, up to 80' AGL/3991' MSL. **Rwy 23**, fence 1201' from departure end of runway, 10' left of centerline, 20' AGL/4060' MSL. Building 1949' from departure end of runway, 415' left of centerline, 17' AGL/4077' MSL. Tree 3337' from departure end of runway, 391' right of centerline, 43' AGL/4143' MSL. **Rwy 32**, antenna 53' from departure end of runway, 398' right of centerline, 20' AGL/4020' MSL.

**SIDNEY, MT****SIDNEY-RICHLAND MUNI (SDY)****AMDT 4 10210 (FAA)**TAKE-OFF MINIMUMS: **Rwy 29**, 400-2½ or std. with a min. climb of 315' per NM to 2500.

NOTE: **Rwy 1**, trees beginning 86' from DER, left and right of centerline, up to 30' AGL/2072' MSL. **Rwy 19**, trees beginning 245' from DER, 302' right of centerline, up to 30' AGL/2029' MSL. Roads, 5' from DER, 298' right of centerline, up to 20' AGL/2003' MSL. Pole, 21' from DER, 298' right of centerline, up to 10' AGL/1992' MSL. **Rwy 29**, terrain left and right of centerline beginning 962' from DER, up to 2123' MSL. Poles beginning 778' from DER, left and right of centerline, up to 39' AGL/2181' MSL. Trees beginning 596' from DER, 165' right of centerline, up to 30' AGL/2026' MSL. Derrick 1452' from DER, 207' left of centerline, up to 47' AGL/2028' MSL. Road 504' from DER, 15' right of centerline, up to 17' AGL/1998' MSL.

**SNOHOMISH, WA****HARVEY FIELD (S43)****ORIG 09127 (FAA)**TAKE-OFF MINIMUMS: **Rwys 15R, 33L**, NA-obstacles.

**Rwy 15L**, std. w/ min. climb of 353' per NM to 1100, or 1200-2½ for climb in visual conditions. **Rwy 33R**, std. w/ min. climb of 475' per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15L**, climbing right turn on 344° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence... **Rwy 33R**, climb on 329° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence...

... aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 339° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

NOTE: **Rwy 15L**, tree 81' from DER, 177' right of centerline, 40' AGL/106' MSL. Trees 685' from DER, left and right of centerline, up to 48' AGL/70' MSL. **Rwy 33R**, powerline 139' from DER, 226' left of centerline, 40' AGL/56' MSL. Tree 298' from DER, 205' right of centerline, 104' AGL/121' MSL. Tower 5708' from DER, 1956' right of centerline, 206' AGL/300' MSL.





10266

## SPOKANE, WA

FELTS FIELD (SFF)

AMDT 5 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3L**, std. w/ min. climb of 450' per NM to 3600, or 2300-3 for climb in visual conditions. **Rwy 3R**, std. w/ min. climb of 410' per NM to 3700, or 2300-3 for climb in visual conditions. **Rwy 21L**, std. w/ min. climb of 375' per NM to 3200, or 2300-3 for climb in visual conditions. **Rwy 21R**, std. w/ min. climb of 375' per NM to 3200, or 2300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3L, 3R**, climb heading 035° to 3600, then climbing right turn heading 210° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport at or above 4100, then via heading 165° and GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above MCA/MEA for route of flight. **Rwys 21L, 21R**, climb heading 215° to 3200, then climbing left turn heading 190° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport at or above 4100, then via heading 165° and GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA/MEA for route of flight.

NOTE: **Rwy 3L**, trees beginning 1853' from DER, 772' right of centerline, up to 100' AGL/2037' MSL. Trees beginning 3538' from DER, 529' left of centerline, up to 100' AGL/2339' MSL. Antenna, trees and transmission poles beginning 1.5 NM from DER, 16' left of centerline, up to 100' AGL/2579' MSL. Trees beginning 2.3 NM from DER, 723' right of centerline, up to 100' AGL/2499' MSL. **Rwy 3R**, hangar, NDB, and trees beginning 92' from DER, 269' right of centerline, up to 100' AGL/2040' MSL. Trees beginning 4685' from DER, 1033' left of centerline, up to 100' AGL/2339' MSL. Antenna, trees and transmission poles beginning 1.6 NM from DER, 525' left of centerline, up to 100' AGL/2559' MSL. Trees and transmission poles beginning 2.6 NM from DER, 214' right of centerline, up to 150' AGL/2570' MSL. **Rwy 21L**, elevator, pole on building and trees beginning 315' from DER, 302' left of centerline, up to 140' AGL/2080' MSL. **Rwy 21R**, poles and trees beginning 188' from DER, 13' right of centerline, up to 100' AGL/1982' MSL. Elevator, pole, hangar, and building beginning 203' from DER, 1' left of centerline, up to 140' AGL/2080' MSL. Terrain and trees beginning 3.1 NM from DER, 4904' left of centerline, up to 100' AGL/2559' MSL.

## SPOKANE INTL (GEG)

AMDT 6 10266 (FAA)

DEPARTURE PROCEDURE: **Rwy 3**, climbing left turn heading 190° and GEG R-010 to GEG VORTAC. Thence... **Rwy 7**, climbing right turn heading 255° and GEG R-075 to GEG VORTAC, thence... **Rwy 21**, climbing right turn heading 208° and GEG R-028 to GEG VORTAC. Thence... **Rwy 25**, climbing left turn heading 176° and GEG R-356 to GEG VORTAC. Thence...

...climb in GEG VORTAC holding pattern (hold Southwest, right turns, 028° inbound) to cross GEG VORTAC at or above MEA for route of flight.

NOTE: **Rwy 3**, multiple trees beginning 1089' from DER, 666' left of centerline, up to 100' AGL/2370' MSL. Tree 1524' from DER, 851' right of centerline, 100' AGL/2374' MSL.

## STEVENSVILLE, MT

STEVENSVILLE

TAKE-OFF MINIMUMS: **Rwy 12**, do not exceed 210 knots until established on MSOR-163. **Rwy 30**, do not exceed 210 knots until established on MSOR-160.

DEPARTURE PROCEDURE: **Rwy 12**, climbing right turn via heading 335 and MSOR R-163 to MSO VOR/DME climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course. **Rwy 30**, climbing right turn via heading 025° and MSO R-160 to MSO VOR/DME Climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.

## SUNRIVER, OR

SUNRIVER

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 360' per NM to 4400. **Rwy 36**, 600-2 or std. with a min. climb of 240' per NM to 4900.

DEPARTURE PROCEDURE: **Rwy 18**, climb runway heading to 7000 then climbing left turn direct DSD VORTAC. **Rwy 36**, climb direct to DSD VORTAC. Then all aircraft climb on course.

## TACOMA, WA

TACOMA NARROWS

TAKE-OFF MINIMUMS: **Rwy 35**, 400-1 or std. with a min. climb of 210' per NM to 400'.

DEPARTURE PROCEDURE: **Rwy 17**, turn right, climb via heading 230° to intercept OLM R-009 then direct OLM VORTAC. **Rwy 35**, turn left, climb via heading 270° to intercept SEA R-230 then direct CARRO INT. Continue climb in holding (SW, right turns, 047° inbound) to MEA or assigned altitude for route of flight.

## THE DALLES, OR

COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

AMDT 2A 10182 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, 900-3 or std. with a min. climb of 330' per NM to 1200. **Rwy 12**, 1400-3 or std. with a min. climb of 500' per NM to 2000. **Rwy 25**, NA. **Rwy 30**, 2900-3 or std. with a min. climb of 500' per NM to 2700.

DEPARTURE PROCEDURE: **Rwy 7**, climbing right turn heading 120°. **Rwy 12**, climb via runway heading.

**Rwy 30**, climbing left turn heading 120°. All aircraft intercept and climb southbound via LTJ R-165 to 3500. Then climbing left turn direct LTJ VORTAC. Continue climb in LTJ holding pattern (E, right turns, 260° inbound) to cross LTJ VORTAC at or above MCA or MEA for route of flight.

## TILLAMOOK, OR

TILLAMOOK

TAKE-OFF MINIMUMS: **Rwys 1, 13, 19**, NA. **Rwy 31**, 2000-3 or std. with a min. climb of 350' per NM to 4500.

DEPARTURE PROCEDURE: **Rwys 1, 13, 19**, NA. **Rwy 31**, use FETUJ RNAV DEPARTURE.

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NW-1



**TORRINGTON, WY**

TORRINGTON MUNI (TOR)

ORIG 10042 (FAA)

NOTE: **Rwy 2**, terrain 30' from DER, 277' left of centerline, 4197' MSL. **Rwy 10**, multiple trees and fence beginning 71' from DER, 143' right of centerline, up to 14' AGL/4214' MSL. Terrain 14' from DER, 502' left of centerline, 4199' MSL. **Rwy 28**, terrain 133' from DER, 386' right of centerline, 4213' MSL.

**TWIN FALLS, ID**

JOSLIN FIELD-MAGIC VALLEY RGNL

TAKE-OFF MINIMUMS: **Rwy 12**, NA.

DEPARTURE PROCEDURE: Aircraft departing on TWFF R-240 CW R-080 climb on course. All others climb runway heading 6000 then climbing turn direct TWFF VORTAC. Climb in holding pattern (NW, right turns, 113° inbound) to MCA or MEA as appropriate for direction of flight.

**VANCOUVER, WA**

PEARSON FIELD (VUO)

AMDT 2 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8**, std. w/ min. climb of 358' per NM to 600, or 500-3 w/ min. climb of 201' per NM to 600, or 900-2½ for climb in visual conditions. **Rwy 26**, 600-3 or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8**, climb heading 079° to 500 then climbing left turn direct BTG VORTAC, thence... or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence... **Rwy 26**, climb heading 259° to 700 then climbing right turn direct BTG VORTAC, thence... or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence...

...continue climb in BTG VORTAC holding pattern (hold northwest, right turn, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8**, tree 1.4 NM from departure end of runway, 1283' left of centerline, 100' AGL/395' MSL. Tree 1.7 NM from departure end of runway, 701' left of centerline, 100' AGL/401' MSL. Tree 2 NM from departure end of runway, 849' left of centerline, 100' AGL/406' MSL. Tree 2.4 NM from departure end of runway, 648' left of centerline, 100' AGL/399' MSL. **Rwy 26**, bridge 2704' from departure end of runway, 587' left of centerline, 243' AGL/245' MSL. Crane 1.5 NM from departure end of runway, 2563' right of centerline, 237' AGL/267' MSL. Transmission line tower 2.5 NM from departure end of runway, 2036' right of centerline, 516' AGL/534' MSL.

**WALLA WALLA, WA**

WALLA WALLA RGNL

DEPARTURE PROCEDURE: **Rwys 2, 7, 20, 25, 34**, turn left. **Rwy 16**, turn right. **All aircraft** climb to 2500 via ALW VOR/DME R-195, then climbing right turn direct ALW VOR/DME to cross ALW VOR/DME at or above MEA or MCA for route of flight.

NOTE: **Rwy 16**, antenna 365' from departure end of runway, 97' right of centerline, 1155' MSL. Terrain 1' from departure end of runway 140' left of centerline, 1145' MSL. **Rwy 20**, light 666' from departure end of runway, 640' left of centerline, 1170' MSL. **Rwy 34**, terrain 213' from departure end of runway, 230' right of centerline, 1130' MSL.

**WEISER, ID**

WEISER MUNI (S87)

ORIG 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, std. w/ min. climb of 310' per NM to 3900 or 2400-3 for climb in visual conditions. **Rwy 30**, std. w/ min. climb of 360' per NM to 4000 or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12**, climb heading 121° to 3900 before proceeding on course. **Rwy 30**, climb heading 301° to 4000 before proceeding on course

...for climb in visual conditions: cross Weiser Muni airport at or above 4400 before proceeding on course.

NOTE: **Rwy 12**, tree 248' from departure end of runway, 443' right of centerline, 100' AGL/2184' MSL. **Rwy 30**, tree 1907' from departure end of runway, 769' right of centerline, 100' AGL/2174' MSL.

**WENATCHEE, WA**

PANGBORN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 12**, 1500-2 or std. with a min. climb of 510' per NM to 2900.

**Rwys 25, 30**, CAT A,B 1600-2 or std. with a min. climb of 360' per NM to 3100. CAT C,D 5500-3 or std. with a min. climb of 570' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 12**, climb runway heading. **Rwys 25, 30**, climbing left turn. **All aircraft** climb via EAT R-113 to 4000 then climbing left turn direct EAT VOR/DME. Aircraft departing EAT R-010 CW R-140 climb on course. All others continue climb in EAT VOR/DME holding pattern (E, right turns, 253° inbound) to cross EAT VOR/DME at or above: R-141 CWR-200 7400; R-201 CW R-009, 8200.

**WEST YELLOWSTONE, MT**

YELLOWSTONE

TAKE-OFF MINIMUMS: **Rwy 19**, 2200-2 or std. with a min. climb of 245' per NM to 8900. FAR 135 AUTH:

**Rwy 1**, ½ mile.

DEPARTURE PROCEDURE: **Rwy 1**, turn right.

**All aircraft** climb direct TARGY LOM. Aircraft departing TARGY LOM on bearing 190° CW 220° climb on course. All others climb south on bearing 190° within 10 NM of TARGY LOM turn left and continue climbing direct TARGY LOM to cross TARGY LOM at or above: bearing 360° CW 190° 9300, bearing 220° CW 360° 10500





## WHEATLAND, WY

## PHIFER AIRFIELD

DEPARTURE PROCEDURE: **Rwy 8**, climbing left turn to 9000 via heading 030° to intercept IIP VOR/DME R-140 to JZZY Int, thence... **Rwy 26**, climbing right turn to 9000 via heading 360° and GYZ NDB course 051° to JZZY INT, thence...

...continue climb-in-hold (hold northwest, right turn, 140° inbound) to 9000 before proceeding on course.

NOTE: **Rwy 8**, multiple trees 512' from departure end of runway, 584' left of centerline, 100' AGL/4859' MSL.

**Rwy 26**, multiple trees, buildings, poles/lights, siren, roads w/ vehicles beginning 2' from departure end of runway, on centerline, to 488' left of centerline, 100' AGL/4899' MSL. Multiple trees, buildings, poles/lights, roads w/ vehicles beginning 2' from departure end of runway, on centerline to 499' right of centerline, 100' AGL/4859' MSL.

## WORLAND, WY

## WORLAND MUNI

TAKE-OFF MINIMUMS: **Rwys 4, 10, 22, 28**, NA. **Rwy 16**, 300-2 or std. with a min. climb of 230' per NM to 4600.

DEPARTURE PROCEDURE: **All aircraft** climb to 5000, then direct RLY VOR/DME. Aircraft departing RLY R-061 CW R-349 climb on course. All others continue climb in RLY VOR/DME holding pattern (N, right turns, 159° inbound) to cross RLY VOR/DME at or above 7000.

## YAKIMA, WA

## YAKIMA AIR TERMINAL/MCALLISTER FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, NA. **Rwy 9**, 800-4 or std. with a min. climb of 300' per NM to 5000. **Rwys 22, 27**, 2500-3 or std. with a min. climb of 300' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 4**, NA. **Rwys 9, 22, 27**, Use ZILLA DEPARTURE PROCEDURE.

## WHIDBEY ISLAND NAS (AULT FIELD)

## (KNW) . . . . . 10210

Diverse departures not authorized.

MILITARY DEPARTURE PROCEDURE: **Rwy 7**:

Minimum climb of 420'/NM until 800. Climbing left turn to 2000, intercept NUW R-067, expect radar vectors to join assigned route. **Rwy 14**: Cross DER at or above 11' AGL/60' MSL. Climbing left turn to 2000, intercept NUW R-128, expect radar vectors to join assigned route. **Rwy 25**: Climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS**: If vectors are not received by 10 DME of NUW TACAN, climb to 3000, intercept the NUW 11 DME ARC to join assigned route.

CIVIL DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 410'/NM until 800. Climb to 2000 via heading 067°, expect radar vectors to join assigned route. **Rwy 14**: Cross DER at or above 11' AGL/60' MSL.

Climbing left turn to 2000, via heading 128°, expect radar vectors to join assigned route. **Rwy 25**: Use published DP or climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS**: If vectors are not received by 10 DME of NUW TACAN, climb to 3000, proceed direct CVV VOR/DME to join assigned route.

TAKE-OFF OBSTACLES: **Rwy 7**: Trees, 204' MSL, 3278' from DER, 1357' left of centerline; Trees, 434' MSL, 4727' from DER, 4828' left of centerline; Trees, 486' MSL, 5464' from DER, 5803' left of centerline; Trees, 279' MSL, 1.26 NM from DER, 2431' left of centerline; Trees, 397' MSL, 1.41 NM from DER, 3685' left of centerline; Trees, 525' MSL, 1.95 NM from DER, 1.17 NM left of centerline; Trees, 480' MSL, 1.99 NM from DER, 5119' right of centerline; Trees, 338' MSL, 1.46 NM from DER, 2996' right of centerline; Trees, 499' MSL, 1.6 NM from DER, 1 NM right of centerline; Trees, 512' MSL, 1.6 NM from DER, 1.11 NM left of centerline; Trees, 519' MSL, 1.96 NM from DER, 1.15 NM left of centerline; Trees, 525' MSL, 1.82 NM from DER, 1.21 NM left of centerline. **Rwy 14**: Trees, 123' MSL, 2624' from DER, 849' right of centerline; Trees, 274' MSL, 1.47 NM from DER, 2467' right of centerline; Trees, 375' MSL, 2.10 NM from DER, 1844' left of centerline.

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**SKYLINE SPB** (21H) 3 W UTC-8(-7DT) N48°28.99' W122°41.08'

SEATTLE

00 NOTAM FILE SEA.

**WATERWAY NW-SE:** 5000X2500 (WATER)

**WATERWAY NW:** Hill.

**WATERWAY SE:** Hill.

**SEAPLANE REMARKS:** Unattended. Land to SE. Military arrival corridor N and W of arpt.

**COMMUNICATIONS:** CTAF 128.25

## ANATONE

**ROGERSBURG** (D69) 8 SE UTC-8(-7DT) N46°04.47' W116°57.97'

SEATTLE

869 NOTAM FILE SEA

**RWY 09-27:** 1471X50 (TURF)

**AIRPORT REMARKS:** Unattended. Arpt CLOSED 15 Nov-1 Mar. Be alert for horses, deer, and elk on rwy. Vehicles, pedestrians, or wildlife on or invof rwy. No camping, fires, or parking for more than five acft at any time. Spill kit avbl.

**COMMUNICATIONS:** CTAF 122.9

**ANDERSON FLD** (See BREWSTER)

**APEX AIRPARK** (See SILVERDALE)

**ARLINGTON MUNI** (AWO) 3 SW UTC-8(-7DT) N48°09.65' W122°09.54'

SEATTLE

142 B S4 **FUEL** 100LL, JET A+ TPA—See Remarks NOTAM FILE AWO

H-1B, L-1E

**RWY 16-34:** H5332X100 (ASPH) S-114, D-150, 2S-175, 2D-270 MIRL

IAP

**RWY 16:** REIL. PAPI(P2L)—GA 3.0° TCH 40'. Tree. Rgt tfc.

**RWY 34:** MALS. PAPI(P2L)—GA 3.0° TCH 46'.

**RWY 11-29:** H3498X75 (ASPH) S-32, D-34, 2D-59

**RWY 11:** REIL. PAPI(P2L)—GA 3.5° TCH 42'. Rgt tfc.

**RWY 29:** REIL. PAPI(P2L)—GA 4.0° TCH 40'. Tree.

**AIRPORT REMARKS:** Attended 1600Z±-dusk. 100LL fuel avbl 24 hr credit card svc. Glider operations at arpt daily. Ultralight ops daily at NW corner of arpt. Occasional hot air balloon activity. Helicopter training area, autorotations in grass and on south parallel twy Rwy 29 and along Twy B. Hovering area near compass rose located area Rwy 29 and Twy E. TPA—1200(1058). TPA for ultralights 500(358), helicopters 637(495). Taxiing acft over 30,000 lbs remain clear of west side of arpt, Twy C and ramps on west side of Twy D. **ACTIVATE MALS** Rwy 34—122.7. PAPI Rwy 11, 16, 29 and 34 and REIL Rwy 11, 16, and 29 ops 24 hrs. Landing fee for acft over 12,500 lbs.

**WEATHER DATA SOURCES:** AWOS-3 135.625 (360) 435-8045.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

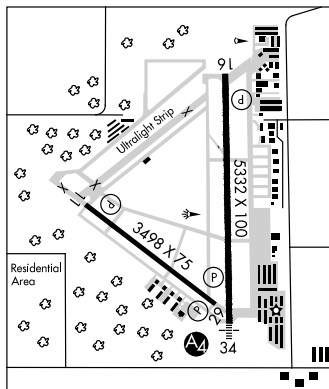
® SEATTLE CENTER APP/DEP CON 128.5

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PAE.

**PAINE (L) VORW/DME** 110.6 PAE Chan 43 N47°55.19' W122°16.67' 358° 15.2 NM to fld. 670/20E.

**WATON NDB (LOM)** 382 AW N48°04.57' W122°09.23' 338° 5.1 NM to fld.

**ILS** 111.5 I-AWO Rwy 34. LOM WATON NDB. Localizer only. Localizer unmonitored continuously.



LOC I-AWO	APP CRS	Rwy Idg	<b>5332</b>
<b><u>111.5</u></b>	<b>339°</b>	TDZE	<b>131</b>
		Apt Elev	<b>137</b>

LOC RWY 34  
ARLINGTON MUNI (AWO)

<b>T</b>	Inoperative table does not apply to Cat C.
<b>A</b> NA	Use Arlington altimeter setting, if not received use Whidbey Island NAS altimeter setting and increase all MDAs 100 feet.

MALS

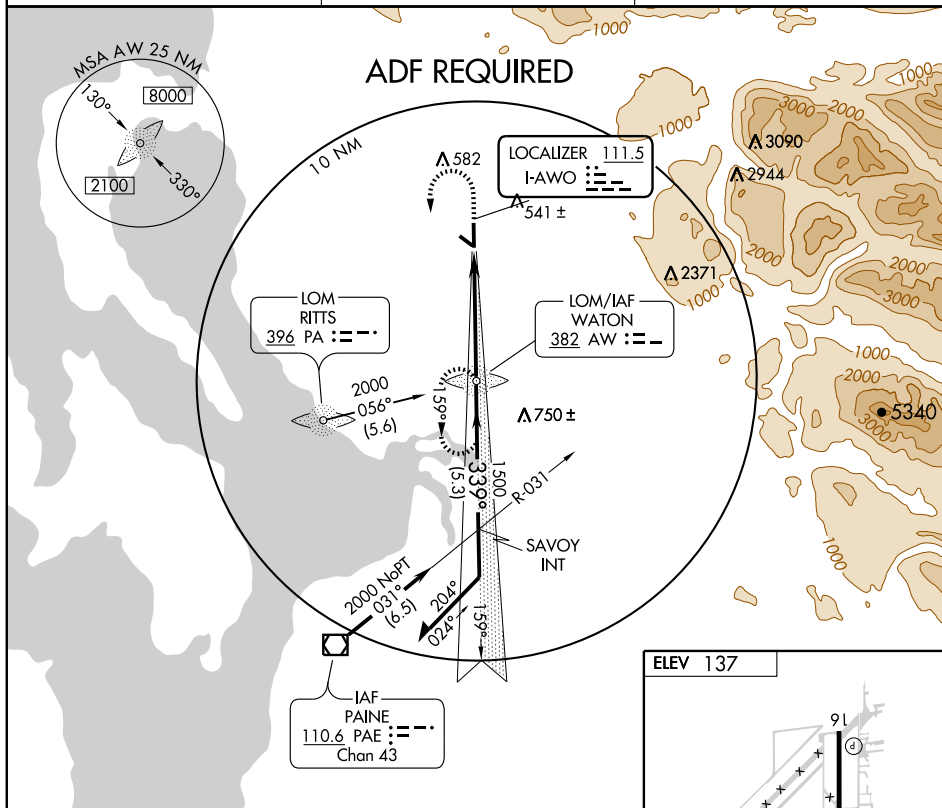


**MISSED APPROACH:** Climb to 1000 then climbing left turn to 2000 direct AW LOM and hold.

AWOS-3  
135.625

SEATTLE CENTER  
**128.5 306.9**

UNICOM  
122.7 (CTAF) **L**



NW-1. 21 OCT 2010 to 18 NOV 2010

Remain  
within 10 NM

AW LOM

2000

1000  
↑

2000

AW  
382

339° 4.7 NM

MIRL Rwy 16-34  
REIL Rwy 11, 16, and 29

FAF to MAP 4.7 NM

CATEGORY	A	B	C	D
S-34	600- $\frac{3}{4}$ 469 (500- $\frac{3}{4}$ )		600-1 $\frac{1}{4}$ 469 (500-1 $\frac{1}{4}$ )	600-1 $\frac{1}{2}$ 469 (500-1 $\frac{1}{2}$ )
CIRCLING	800-1 663 (700-1)	860-1 723 (800-1)	860-2 723 (800-2)	920-2 $\frac{1}{2}$ 783 (800-2 $\frac{1}{2}$ )

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

ARLINGTON, WASHINGTON  
Amdt 4B 10042

48°10'N-122°10'W

ARLINGTON MUNI (A WO)  
LOC RWY 34

LOM AW	APP CRS	Rwy Idg	<b>5332</b>
<b><u>382</u></b>	<b>339°</b>	TDZE	<b>131</b>
		Apt Elev	<b>137</b>

NDB or GPS RWY 34  
ARLINGTON MUNI (AWO)

**T** Inoperative table does not apply to Cat C.  
**A** Use Arlington altimeter setting, if not received use Whidbey Island NAS altimeter setting and increase all MDAs 100 feet.

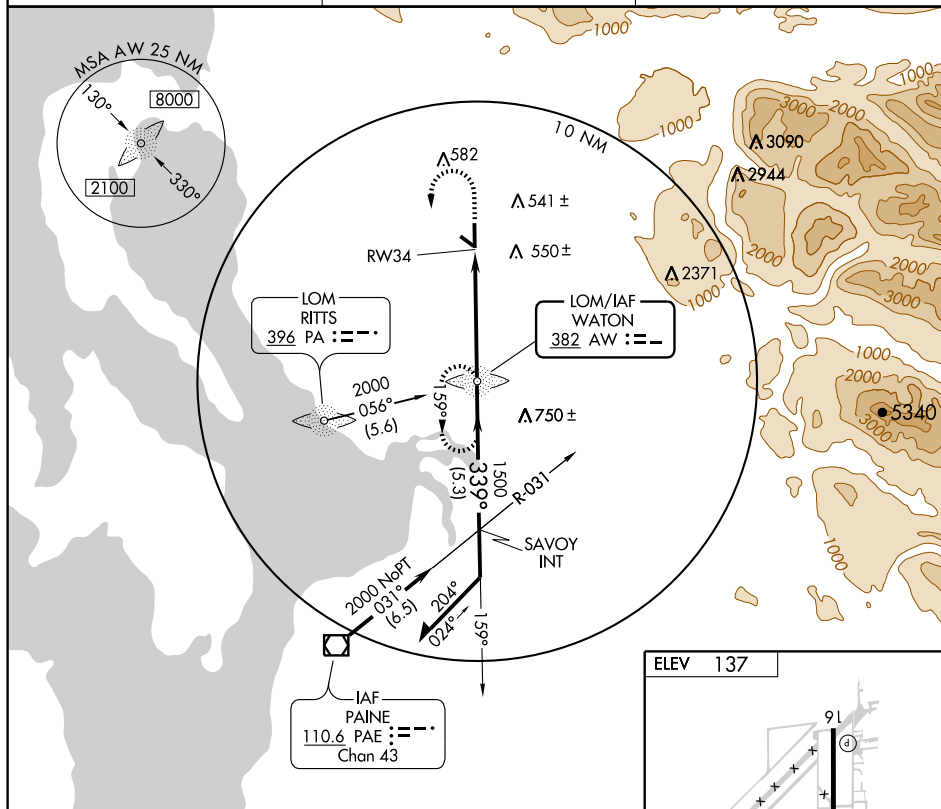
MALS



**MISSED APPROACH:** Climb to 1000 then climbing left turn to 2000 direct AW LOM and hold.

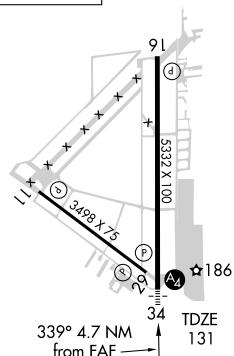
AWOS-3  
135.625

SEATTLE CENTER  
128.5 306.9

UNICOM  
122.7 (CTAF) **L**

NW-1. 21 OCT 2010 to 18 NOV 2010

ELEV 137



MIRL Rwy 16-34

REIL Rwy 11, 16 and 29

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

CATEGORY	A	B	C	D
S-34	860-3/4	729 (800-3/4)	860-2 729 (800-2)	860-2 1/4 729 (800-2 1/4)
CIRCLING	860-1	723 (800-1)	860-2 723 (800-2)	920-2 1/2 783 (800-2 1/2)

ARLINGTON, WASHINGTON

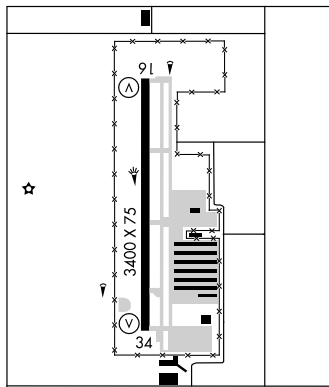
Amdt 3A 10042

48°10'N-122°10'W

ARLINGTON MUNI (AWO)

NDB or GPS RWY 34

**AUBURN MUNI** (S50) 2 N UTC-8(-7DT) N47°19.66' W122°13.60'  
 63 B S4 **FUEL** 100LL OX 4 TPA-1063(1000) NOTAM FILE SEA  
**Rwy 16-34:** H3400X75 (ASPH) S-12.5 MIRL  
**Rwy 16:** REIL. VASI(V4R). Building. Rgt tfc.  
**Rwy 34:** REIL. VASI(V4L)—GA 4.0° TCH 53'. Parking lot.  
**AIRPORT REMARKS:** Attended 1600-0100Z+. Fuel 24 hrs credit card self  
 svc. Rwy 16 east-west high voltage transmission line, 80' AGL  
 located 1804' N of Rwy 16 thld at 20:1. Sea gulls and other birds  
 using lagoon on W side of arpt. Ultralights and hot air balloons  
 prohibited. Plan apchs and departures to avoid extremely noise  
 sensitive residential area E of the arpt.  
**COMMUNICATIONS:** CTAF/AUNICOM 122.8  
 Ⓡ **SEATTLE APP/DEP CON** 123.85  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA.  
**SEATTLE (H) VORTACW** 116.8 SEA Chan 115 N47°26.12'  
 W122°18.58' 133° 7.3 NM to fld. 354/19E.



**AUGSPURGER MOUNTAIN** N45°44.06' W121°40.79'  
**RCO** 122.3 (MC MINNVILLE RADIO)

SEATTLE  
 L-1C

**AULT FLD** (See WHIDBEY ISLAND NAS)

**AVEY FLD STATE** (See LAURIER)

**BADGER MOUNTAIN** N47°35.29' W120°08.60'  
**RCO** 122.3 (SEATTLE RADIO)

SEATTLE  
 L-1D, 9A

**BANDERA STATE** (4W0) 0 W UTC-8(-7DT) N47°23.72' W121°32.19'  
 1636 NOTAM FILE SEA  
**Rwy 08-26:** 2344X200 (TURF)  
**Rwy 08:** Trees **Rwy 26:** Trees  
**AIRPORT REMARKS:** Unattended. Arpt CLOSED 1 Oct-1 June. Rwy 08-26 west end extremely rough, rwy soft when wet.  
 Watch for pedestrian, vehicles and animals on rwy. Ctc Washington State Aviation Division 360-651-6300 or  
 1-800-552-0666 Washington area for facility information prior to use.  
**COMMUNICATIONS:** CTAF 122.9

SEATTLE

**BATTLE GROUND** N45°44.87' W122°35.49' NOTAM FILE PDX.  
 (H) **VORTACW** 116.6 BTG Chan 113 161° 9.6 NM to Portland Intl. 253/21E.  
 TACAN azimuth and DME unusable 035°-085° byd 35 NM blo 10,000'.

SEATTLE  
 H-1B, L-1C

## BATTLE GROUND

**CEDARS NORTH AIRPARK** (W58) 1 NW UTC-8(-7DT) N45°45.87' W122°30.91'  
 275 NOTAM FILE SEA  
**Rwy 08-26:** 1960X50 (TURF)  
**Rwy 08:** Road. **Rwy 26:** Road.  
**AIRPORT REMARKS:** Unattended. Birds on and invof arpt. Transition between rwy and twy on marked twys only.  
**COMMUNICATIONS:** CTAF 122.9

SEATTLE

**GOHEEN** (W52) 3 NW UTC-8(-7DT) N45°49.61' W122°34.61'  
 292 B S4 **FUEL** 100 NOTAM FILE SEA  
**Rwy 15-33:** 2565X50 (TURF) LIRL  
**Rwy 15:** VASI(NSTD). Trees. **Rwy 33:** P-line.  
**Rwy 07-25:** 1500X48 (TURF)  
**Rwy 07:** Building. **Rwy 25:** Tree.

SEATTLE

**AIRPORT REMARKS:** Attended continuously. Rwy 07-25 for emerg only. Rwy 15-33 width of 43' over culvert in center  
 of fld. Rwy 15-33 sfc uneven with an incline. Rwy 15 has NSTD single lgt VASI both sides of rwy. ACTIVATE ben  
 and LIRL Rwy 15-33—CTAF.

**COMMUNICATIONS:** CTAF 122.9

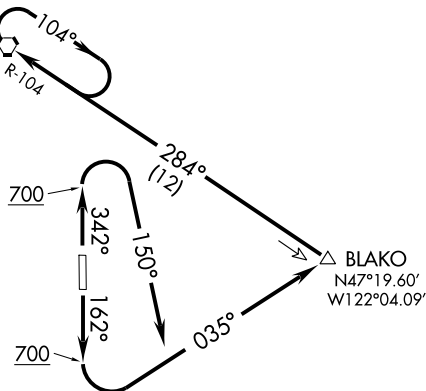
SEATTLE CLNC DEL  
128.0  
SEATTLE DEP CON  
123.85

TAKE-OFF MINIMUMS

RWY 16: Standard with minimum climb of 266' per NM to 1200 or 1200-2½ for climb in visual conditions, do not exceed 180 KIAS until passing BLAKO.

RWY 34: Standard with minimum climb of 300' per NM to 900 or 1200-2½ for climb in visual conditions, do not exceed 180 KIAS until passing BLAKO.

SEATTLE  
116.8 SEA  
Chan 115  
N47°26.12' W122°18.58'  
L-1, H-1



McCHORD  
109.6 TCM  
Chan 33

TAKE-OFF OBSTACLE NOTES:

RWY 16: AAO 3.2 NM from DER, 3643' left of centerline 200' AGL/724' MSL.

RWY 34: AAO 3.2 NM from DER, 5520' right of centerline 200' AGL/639' MSL. Powerline 1804' from DER, on centerline, 80' AGL/122' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb heading 162° to 700, then climbing left turn to 3000 via the TCM R-035 to BLAKO INT then left turn via the SEA R-104 to SEA VORTAC; or climb in visual conditions east of RWY 16/34 to cross Auburn Muni southbound at or above 1200', then climb to 3000 via heading 150° and TCM R-035 to BLAKO INT then left turn via the SEA R-104 to SEA VORTAC. Do not exceed 180 KIAS until passing BLAKO. Thence....

TAKE-OFF RUNWAY 34: Climb heading 342° to 700, then climbing right turn to 3000 via heading 150° to TCM R-035 to BLAKO INT then left turn via the SEA R-104 to SEA VORTAC; or climb in visual conditions east of RWY 16/34 to cross Auburn Muni southbound at or above 1200', then climb to 3000 via heading 150° and TCM R-035 to BLAKO INT then left turn via the SEA R-104 to SEA VORTAC. Do not exceed 180 KIAS until passing BLAKO. Thence....

....hold E SEA VORTAC, RT, 284° inbound; when authorized by ATC, climb-in-hold to 5000, or as assigned before proceeding on course.

APP CRS <b>331°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>63</b>
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**RNAV (GPS)-A**  
AUBURN MUNI (S50)

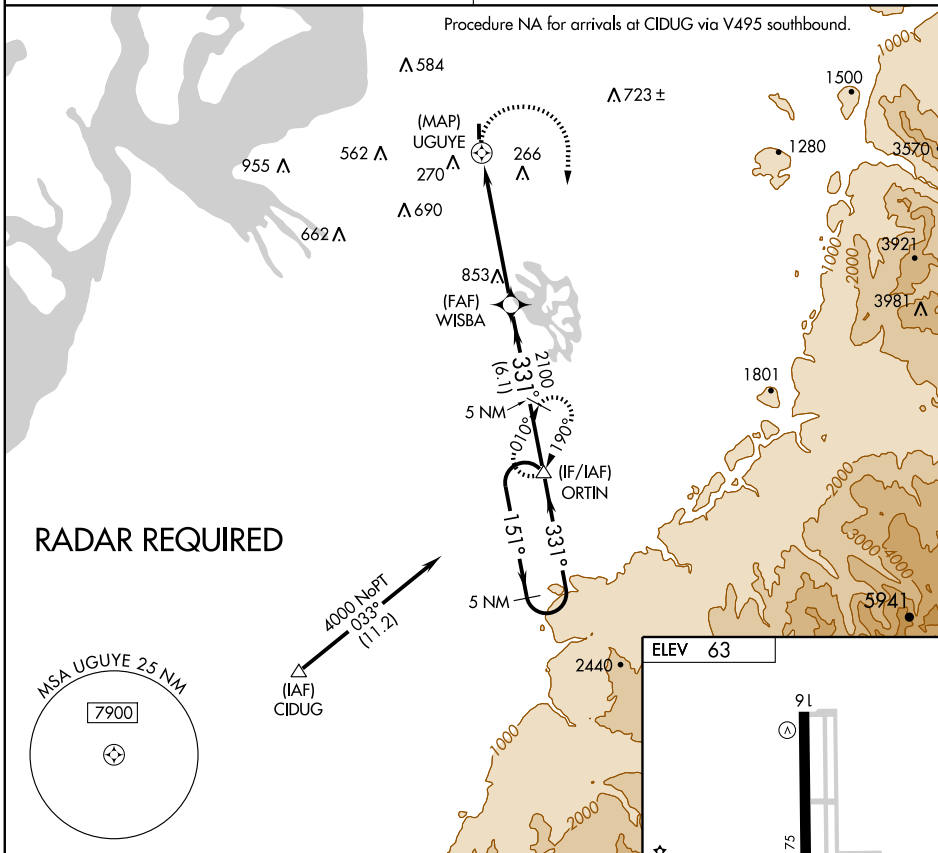
<b>T</b>	Circling NA west of Rwy 16-34.
<b>A</b> NA	Procedure NA at night. DME/DME RNP-0.3 NA. Use Seattle-Tacoma Intl altimeter setting.



**MISSED APPROACH:** Climbing right turn to 6000 direct  
ORTIN and hold, continue climb-in-hold to 6000.

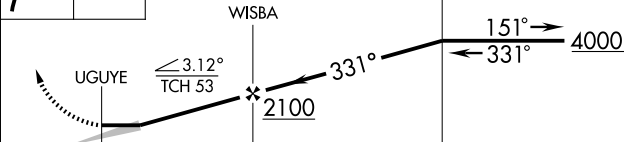
SEATTLE APP CON  
123.85

UNICOM  
122.8 (CTAF)

Procedure NA for arrivals at CIDUG via V495 southbound.



6000 	ORTIN 	VGSI and descent angle not coincident.  WISBA	ORTIN  5 NM Holding Pattern
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	0.5	5.5 NM	6.1 NM	
CATEGORY	A	B	C	D
CIRCLING	1320-1¼ 1257 (1300-1¼)	1320-1½ 1257 (1300-1½)	NA	

MIRL Rwy 16-34  
REIL Rwy 16 and 34



## AIRPORT DIAGRAM

AL-45 (FAA)

BELLINGHAM INTL (BLI)  
BELLINGHAM, WASHINGTON

ATIS  
134.45  
BELLINGHAM TOWER ★  
124.9 379.3  
GND CON  
127.4 379.3

D

ILS  
CRITICAL  
AREAELEV  
163

91

B

162.4°

48°48.0'N

RWY 16-34

S-75, D-160, 2S-175, 2D-250

COMMERCIAL  
AIRCRAFT  
PARKINGCOMMERCIAL  
TERMINALUS  
CUSTOMSTWR  
247FBO/GENERAL AVIATION  
TERMINALTRANSIENT  
PARKINGGENERAL  
AVIATION  
HANGARSFIRE  
STATION

HANGAR

ILS  
CRITICAL  
AREAFIELD  
ELEV  
170

342.4°

34

NOTE: THIS AREA NOT VISIBLE  
FROM TOWER

48°47.0'N

122°32.5'W

122°32.0'W

122°31.5'W

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

## AIRPORT DIAGRAM

BELLINGHAM, WASHINGTON  
BELLINGHAM INTL (BLI)

**BELLINGHAM****BELLINGHAM INTL** (BLI) 3 NW UTC-8(-7DT) N48°47.56' W122°32.25'

170 B S7 FUEL 100LL, JET A OX 3, 4 TPA—See Remarks AOE

ARFF Index—See Remarks NOTAM FILE BLI

**RWY 16-34:** H6701X150 (ASPH-GRVD) S-75, D-160, 2S-175, 2D-250 HIRL**RWY 16:** MALSR. PAPI(P4L)—GA 3.0° TCH 50'. Rgt tfc.**RWY 34:** REIL. VASI(V4L)—GA 3.0° TCH 50'. Tree.**RUNWAY DECLARED DISTANCE INFORMATION****RWY 16:** TORA-6701 TODA-6701 ASDA-6701 LDA-6701**RWY 34:** TORA-6701 TODA-6701 ASDA-6701 LDA-6701

**AIRPORT REMARKS:** Attended continuously. Birds on and in vicinity of airport. Class I, ARFF Index B. PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 360-671-5674. ARFF Index C 1400-0600Z†. Twr svc not avbl at Twy A invof Twy G, the south hold area and the runup area due to obstructed vision. Twy J, Twy F from Twy A eastward to Twy D, and Twy D from Twy E to Twy F closed to air carrier ops. Commercial ramp clsd to pvt acft. Noise abatement procedures in effect ctc arpt manager at 360-671-5674. TPA-1200 (1030) fixed wing; 700 (530), helicopter; 2000 (1830) turbo. Touchdown rwy visual range available Rwy 16. Ldg fee. When twr clsd ACTIVATE HIRL Rwy 16-34, MALSR Rwy 16 and REIL Rwy 34—CTAF. Flight Notification Service (ADCUS) available.

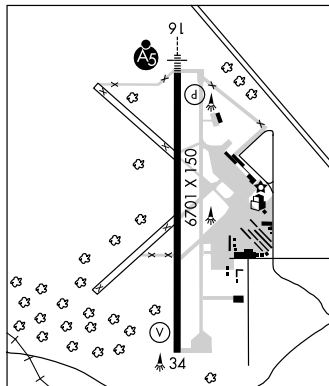
**WEATHER DATA SOURCES:** ASOS (360) 671-8688.**COMMUNICATIONS:** CTAF 124.9 ATIS 134.45 (360) 647-5939

UNICOM 122.95

RCO 122.15 (SEATTLE RADIO)

⑥ **VICTORIA APP/DEP CON** 132.7**TOWER** 124.9 (1500-0630Z†) **GND CON** 127.4**AIRSPACE:** CLASS D svc 1500-0630Z† other times class E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE BLI.

**WHATCOM (H) VORTACW** 113.0 HUH Chan 77 N48°56.72' W122°34.76' 150° 9.3 NM to fld.  
83/20E. **HIWAS.**

**ILS/DME** 108.5 I-BLI Chan 22 Rwy 16. Class IA.**FLOATHAVEN SPB** (ØW7) 6 SE UTC-8(-7DT) N48°44.14' W122°20.40'

SEATTLE

307 S2 NOTAM FILE SEA

**WATERWAY 12-30:** 10000X4000 (WATER)

**SEAPLANE REMARKS:** Attended dalgt hours. Canoe, sailboat, and hang glider activity invof arpt. For airframe repairs call 206-909-7299 prior to arrival to arrange svcs. Land and take off in the center of the lake. Avoid flying over noise sensitive area during tkf and ldg.

**COMMUNICATIONS:** CTAF 122.9**BOEING FLD/KING CO INTL** (See SEATTLE)**BOWERMAN** (See HOQUIAM)**BOWERS FLD** (See ELLENSBURG)

# ILS or LOC RWY 16

BELLINGHAM INTL (BLI)

LOC/DME I-BLI <b>108.5</b> Chan <b>22</b>	APP CRS <b>160°</b>	Rwy Idg <b>6701</b> TDZE <b>163</b> Apt Elev <b>170</b>
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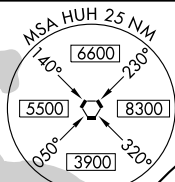
- ▼ For inoperative MALS, increase S-LOC 16 Cat D visibility to RVR 5000.  
 ▲ If local altimeter not received, use Friday Harbor altimeter setting and increase DA to 430 and increase all MDAs 80 feet.  
 VDP NA when using Friday Harbor altimeter setting.  
 \* RVR 1800 authorized with the use of FD or AP or HUD to DA.



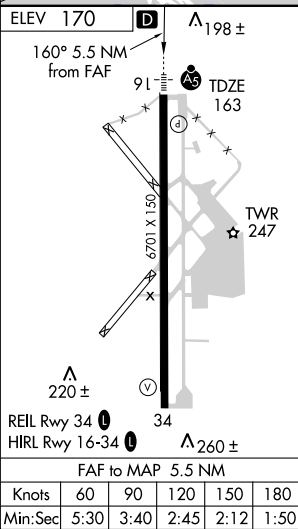
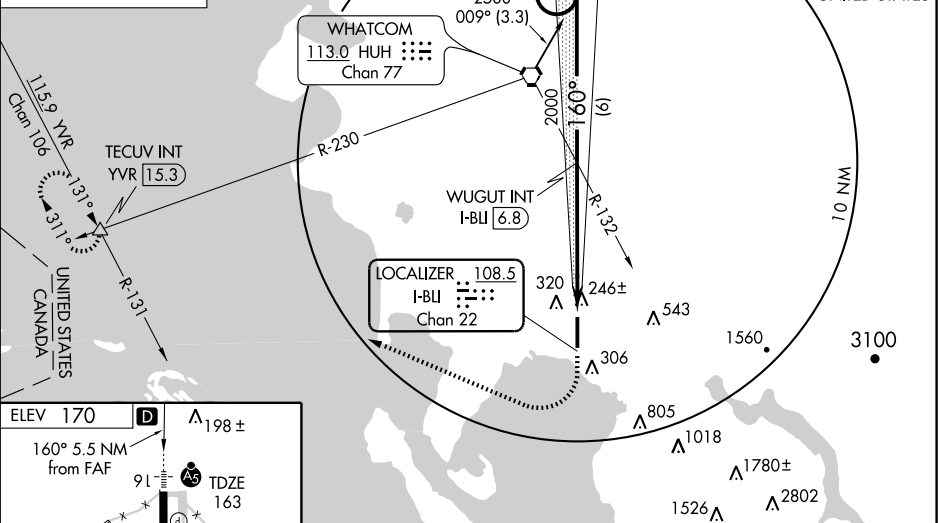
MISSED APPROACH: Climb to 700 then climbing right turn to 2000 via heading 271° and YVR VORTAC R-131 to TECUV INT/YVR 15.3 DME and hold.

ATIS <b>134.45</b>	VICTORIA TERMINAL APP CON <b>132.7 290.8</b>	BELLINGHAM TOWER ★ <b>124.9 (CTAF) 0 379.3</b>	GND CON <b>127.4 379.3</b>	UNICOM <b>122.95</b>
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ALTERNATE MISSED APCH FIX  
 R-329 149° 329°  
 WHATCOM HUH 113.0 Chan 77



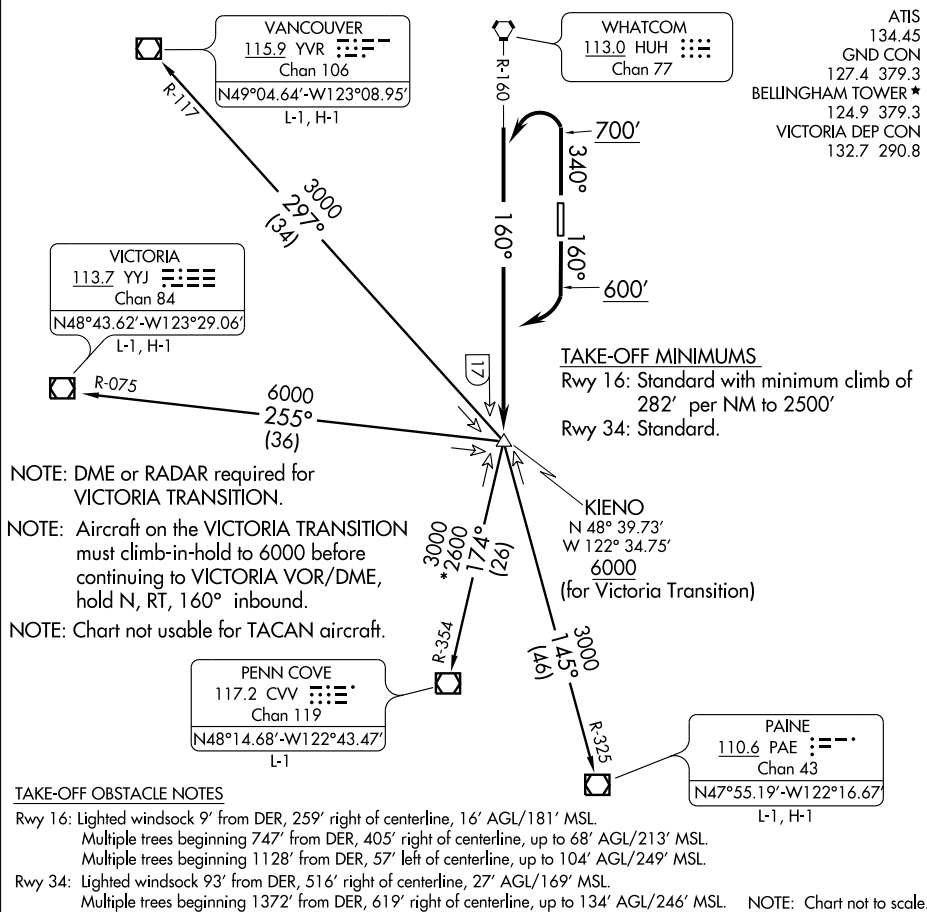
## RADAR OR DME REQUIRED



One Minute Holding Pattern		SECOG I-BLI 12.8		WUGUT INT I-BLI 6.8		<div><div>700</div><div>2000</div><div>YVR R-131</div><div>TECUV</div></div> <div><div>↑</div><div>hdg 271°</div><div>115.9</div><div>△</div></div>	
<div><div>2000</div><div>← 340°</div><div>160° →</div><div>2000</div><div>GS 3.00°</div><div>TCH 50</div></div>				<div><div>2000</div><div>160°</div><div>2000</div></div>		<div><div>I-BLI 2.1</div><div>I-BLI 1.2</div></div>	
		6 NM		4.6 NM		0.9	
CATEGORY	A	B	C	D			
S-ILS 16	* 363/24 200 (200-½)						
S-LOC 16	500/24 337 (400-½)					500/40 337 (400-¾)	
CIRCLING	620-1 450 (500-1)		620-1½ 450 (500-1½)		720-2 550 (600-2)		

## KIENO THREE DEPARTURE

SL-45 (FAA)

BELLINGHAM INTL (BLI)  
BELLINGHAM, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

## DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RUNWAY 16:** Climb heading 160° to 600', then climbing right turn to intercept HUH R-160 to KIENO INT, Thence....

**TAKE-OFF RUNWAY 34:** Climb heading 340° to 700', then climbing left turn to intercept HUH R-160 to KIENO INT. Thence....

....Maintain assigned transition altitude, expect requested altitude within 10 minutes.

**PAINE TRANSITION (KIENO3.PAE):** From over KIENO INT via PAE R-325 to PAE VOR/DME.

**PENN COVE TRANSITION (KIENO3.CVV):** From over KIENO INT via CVV R-354 to CVV VOR/DME.

**VANCOUVER TRANSITION (KIENO3.YVR):** From over KIENO INT via YVR R-117 to YVR VOR/DME.

**VICTORIA TRANSITION (KIENO3.YYJ):** From over KIENO INT via YYJ R-075 to YYJ VOR/DME.

WAAS CH <b>45999</b> <b>W16A</b>	APP CRS <b>160°</b>	Rwy Idg TDZE <b>163</b> Apt Elev <b>170</b>	<b>6701</b> <b>163</b> <b>170</b>
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# RNAV (GPS) RWY 16

BELLINGHAM INTL (BLI)

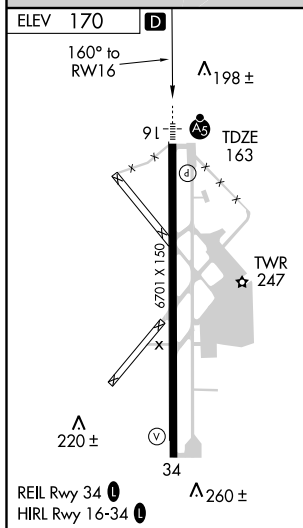
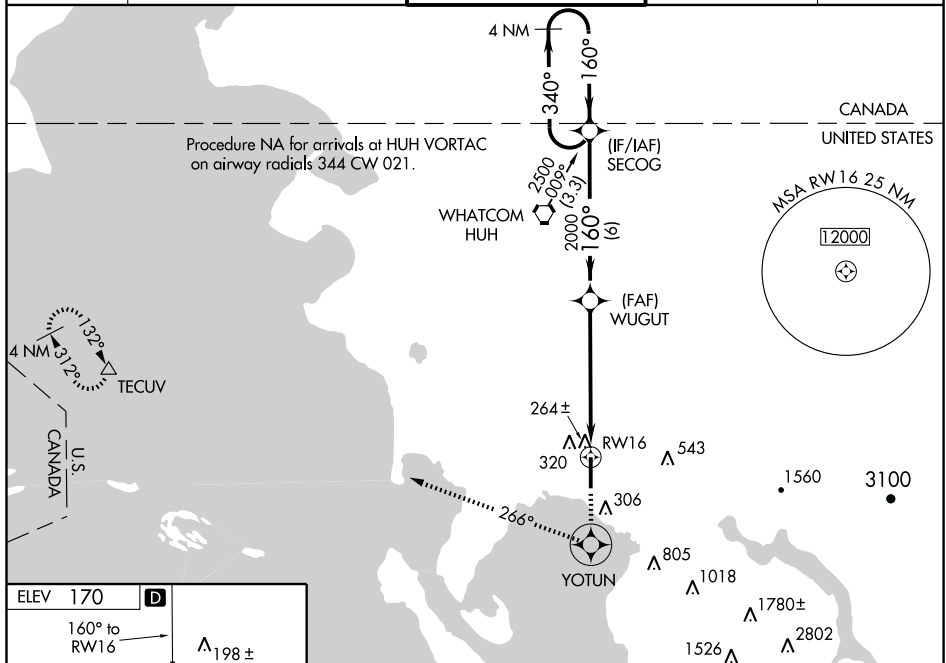
**▼** For inoperative MALSR, increase LPV all Cnts visibility to RVR 5000.  
**▲** Increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA.  
 Baro-VNAV and VDP NA when using Friday Harbor altimeter setting.  
 If local altimeter setting not received, use Friday Harbor altimeter setting and increase all DA/MDAs 80 feet.

MALSR



**MISSED APPROACH:** Climb to 2000  
 direct YOTUN and right turn via 266°  
 track to TECUV and hold.

ATIS <b>134.45</b>	VICTORIA TERMINAL APP CON <b>132.7 290.8</b>	BELLINGHAM TOWER ★ <b>124.9 (CTAF) 379.3</b>	GND CON <b>127.4 379.3</b>	UNICOM <b>122.95</b>
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4 NM Holding Pattern	SECOG	WUGUT	2000	YOTUN	TECUV
2000	340°	160°	2000	266° trk	* LNAV only
GS 3.00° TCH 50	6 NM	4.5 NM	1 NM		
CATEGORY	A	B	C	D	
LPV DA	442/24	279 (300-½)			
LNAV/VNAV DA	554/40	391 (400-¾)			
LNAV MDA	520/24	357 (400-½)	520/50	357 (400-1)	
CIRCLING	620-1	450 (500-1)	620-1½	720-2	550 (600-2)

BELLINGHAM, WASHINGTON

Amdt 1 10154

48°48'N - 122°32'W

BELLINGHAM INTL (BLI)

# RNAV (GPS) RWY 16

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH <b>86223</b> <b>W34A</b>	APP CRS <b>340°</b>	Rwy Idg <b>6701</b> TDZE <b>170</b> Apt Elev <b>170</b>
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## RNAV (GPS) RWY 34

BELLINGHAM INTL (BLI)

<p><b>▼</b> DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).</p>	<p><b>MISSED APPROACH:</b> Climb to 3000 direct VASCU and via 326° climb to HUH VORTAC and hold, continue climb-in-hold to 3000.</p>
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ATIS <b>134.45</b>	VICTORIA TERMINAL APP CON <b>132.7 290.8</b>	BELLINGHAM TOWER ★ <b>124.9 (CTAF) 0 379.3</b>	GND CON <b>127.4 379.3</b>	UNICOM <b>122.95</b>
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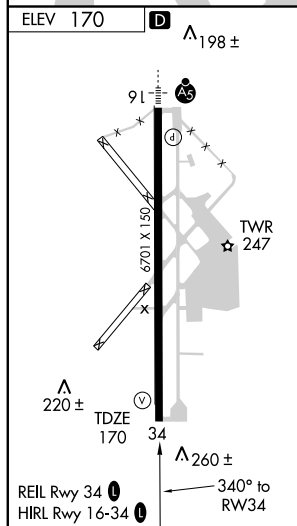
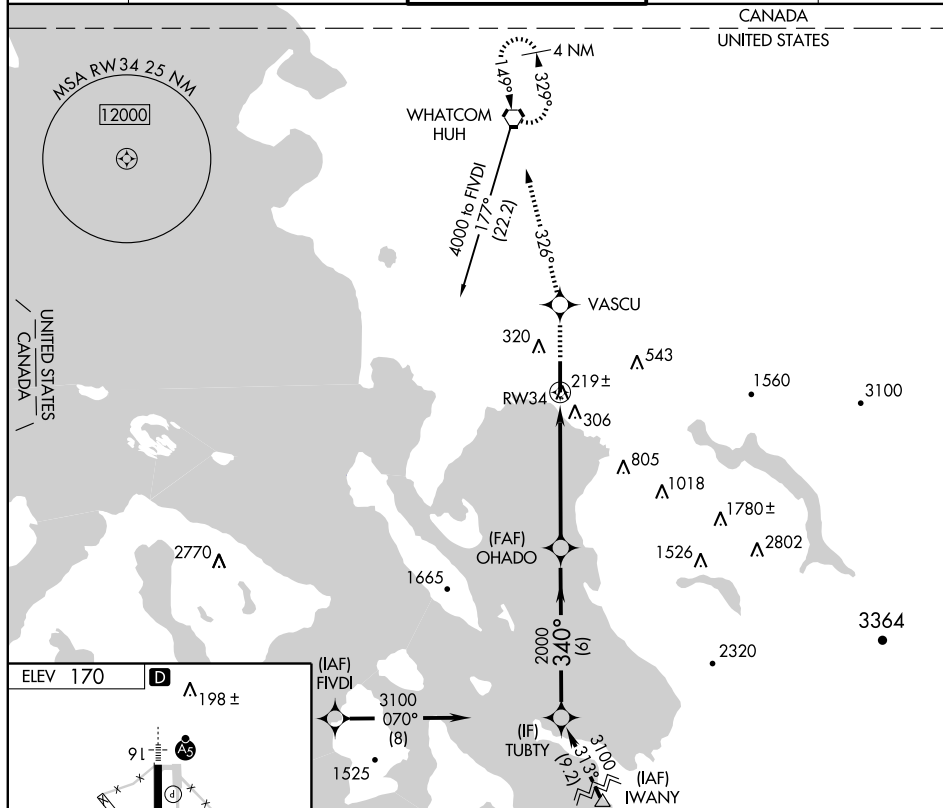


Diagram illustrating a VORTAC with a Procedure Turn NA. The diagram shows a flight path starting from TUFTY, proceeding to a Procedure Turn NA, then to OHADO, and finally to RW34. The distance from TUFTY to OHADO is 6 NM, and from OHADO to RW34 is 5.5 NM. The bearing from TUFTY to OHADO is 340°, and the bearing from OHADO to RW34 is 200°. The distance from TUFTY to OHADO is 3100, and the distance from OHADO to RW34 is 2000. The diagram also shows a VORTAC symbol with a bearing of 326° and a distance of 3000. The diagram is labeled with 'GS 3.00° TCH 50' and 'HUU'.

BELLINGHAM, WASHINGTON

Orig-B 22OCT09

BELLINGHAM INTL (BLI)

48°48'N - 122°32'W

RNAV (GPS) RWY 34

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

**BREMERTON NATIONAL** (PWT) 7 SW UTC-8(-7DT) N47°29.42' W122°45.89'

444 B S4 FUEL 100LL, JET A TPA-1444(1000) NOTAM FILE PWT

RWY 01-19: H6000X150 (ASPH) S-66, D-150, 2S-113, 2D-336 HIRL

RWY 01: PAPI(P4L)—GA 3.0° TCH 45'. Rgt tfe.

RWY 19: MALSR. PAPI(P4L)—GA 3.0° TCH 48'. Fence.

**AIRPORT REMARKS:** Attended 1500-0300Z+. 24 hour fuel terminal located 300' WSW of Twy E. Rwy 19 designated calm wind rwy. All acft above 70,000 lb weight class are required to use Twy E and back taxi on rwy when departing Rwy 19. Wildlife fence crosses north end of abandoned rwy. Fee for aircraft over 60,000 pounds.

ACTIVATE MALSR Rwy 19 and PAPI Rwy 01 and Rwy 19—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 121.2 (360) 674-2811.

**COMMUNICATIONS:** CTAF/UNICOM 123.05

Ⓡ SEATTLE APP/DEP CON 127.1

**AIRSPACE:** CLASS E svc continuous.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE TCM.

OLYMPIA (H) VORTACW 113.4 OLM Chan 81 N46°58.30'

W122°54.11' 351° 31.6 NM to fld. 200/19E. HIWAS.

McCHORD (T) VORTAC 109.6 TCM Chan 33 N47°08.86'

W122°28.50' 308° 23.7 NM to fld. 284/22E. No NOTAM MP Tue, Thu 0700-1600Z+.

CARNEY NDB (MHW) 274 CAN N47°24.63' W122°50.33'

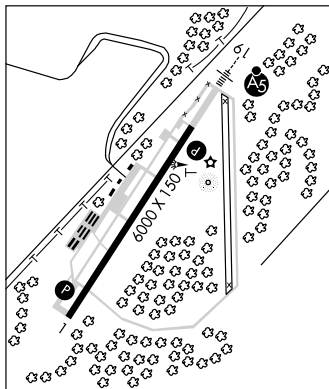
012° 5.7 NM to fld. NOTAM FILE PWT.

NDB unusable 030°-310° beyond 15 NM.

KITSAP NDB (MHW) 206 PWT N47°29.54' W122°45.40' at fld. NOTAM FILE PWT.

NDB unusable 210°-310° byd 12 NM.

ILS 111.1 I-PWT Rwy 19. Class IA.



SEATTLE

H-1B, L-1D

IAP

## BREWSTER

**ANDERSON FLD** (S97) 3 E UTC-8(-7DT) N48°06.29' W119°43.24'

914 B S6 FUEL 100LL NOTAM FILE SEA

RWY 07-25: H4000X60 (ASPH) S-15 MIRL

RWY 25: PAPI (P2L)—GA 3.0°.

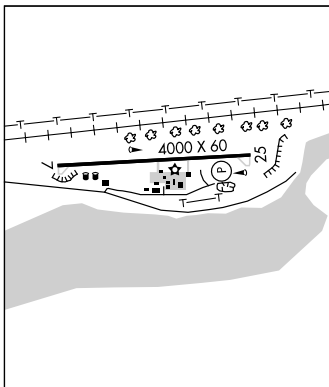
**AIRPORT REMARKS:** Unattended. Fuel emergency use only. See charter opr who lives on fld. PAPI Rwy 25 OTS indef. ACTIVATE MIRL Rwy 07-25—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MWH.

MOSES LAKE (H) VORW/DME 115.0 MWH Chan 97 N47°12.65'

W119°19.01' 325° 56.1 NM to fld. 1194/18E.



SEATTLE

L-13A

**BUCKHORN MOUNTAIN** N46°32.49' W123°01.27'

RCO 122.2 (SEATTLE RADIO)

SEATTLE

L-13A



LOC I-PWT <b>111.1</b>	APP CRS <b>193°</b>	Rwy Idg TDZE Apt Elev <b>6000</b> <b>441</b> <b>444</b>
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# ILS or LOC RWY 19

## BREMERTON NATIONAL (PWT)

**NA** Circling NA for Cat. D west of Rwy 1-19. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase all DA/MDAs 60 feet and all visibilities 3/4 mile, inoperative table does not apply.

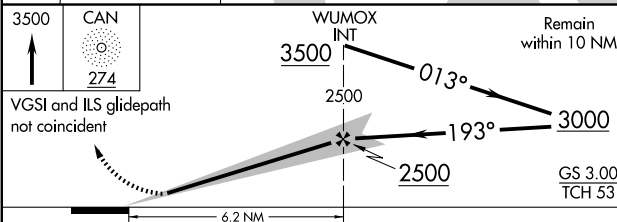
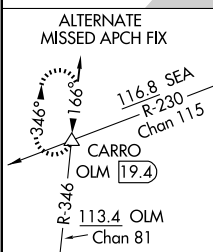
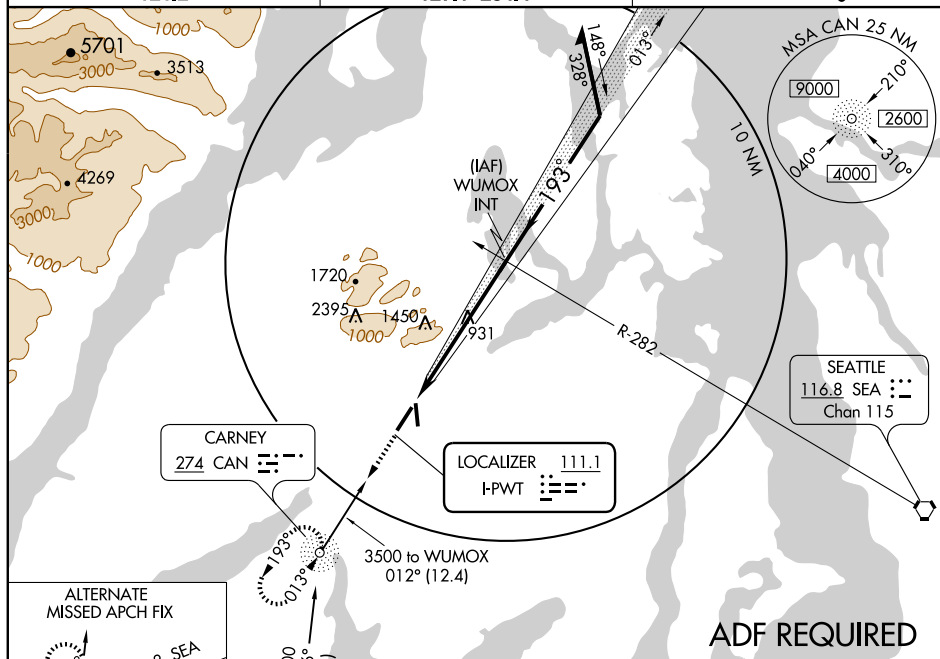


**MISSED APPROACH:** Climb to 3500 direct CAN NDB and hold, continue climb-in-hold to 3500.

AWOS-3  
**121.2**

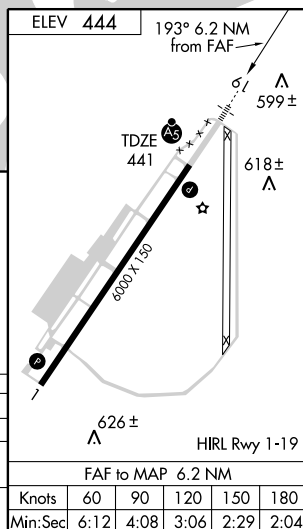
SEATTLE APP CON  
**127.1 254.4**

UNICOM  
**123.05 (CTAF)**



CATEGORY	A	B	C	D
S-ILS 19		645-1/2	204 (300-1/2)	
S-LOC 19	1200-1/2 759 (800-1/2)	1200-3/4 759 (800-3/4)	1200-1 3/4 759 (800-1 3/4)	1200-2 759 (800-2)
CIRCLING	1200-1 756 (800-1)	1200-1 1/4 756 (800-1 1/4)	1200-2 1/4 756 (800-2 1/4)	1200-2 1/2 756 (800-2 1/2)

## ADF REQUIRED



**NDB RWY 1**

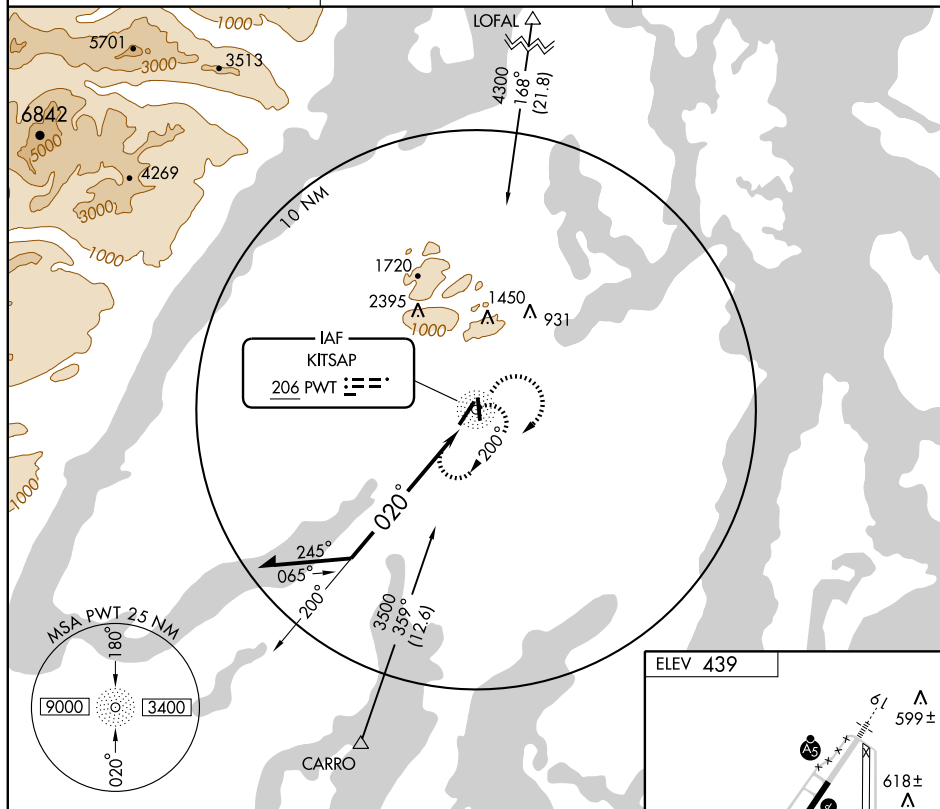
BREMERTON NATIONAL (PWT)

NDB PWT  
**206**APP CRS  
**020°**Rwy Idg  
TDZE  
Apt Elev  
**6000**  
**439**  
**439**

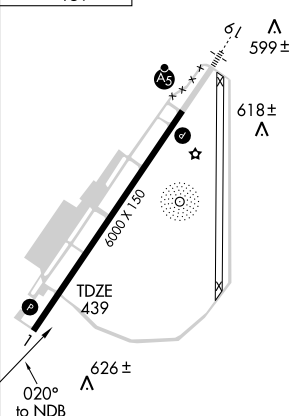
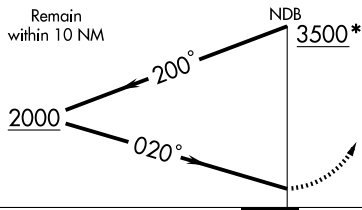
NA

Circling NA west of Rwy 1-19 for Cat.D.

MISSED APPROACH: Climbing right turn to 3500 via 200° bearing from PWT NDB, then direct PWT NDB and hold.

AWOS-3  
**121.2**SEATTLE APP CON  
**127.1 254.4**UNICOM  
**123.05 (CTAF) 0**

ELEV 439

Remain  
within 10 NM\* Maintain 3500 or above  
until established outbound  
for Procedure Turn.

CATEGORY	A	B	C	D
S-1	980-1	541 (600-1)	980-1½ 541 (600-1½)	980-1¾ 541 (600-1¾)
CIRCLING	980-1	541 (600-1)	980-1½ 541 (600-1½)	1000-2 561 (600-2)

HIRL Rwy 1-19

APP CRS  
**013°**

Rwy Idg **6000**  
TDZE **444**  
Apt Elev **444**

# RNAV (GPS) RWY 1

BREMERTON NATIONAL (PWT)

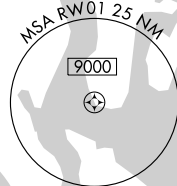
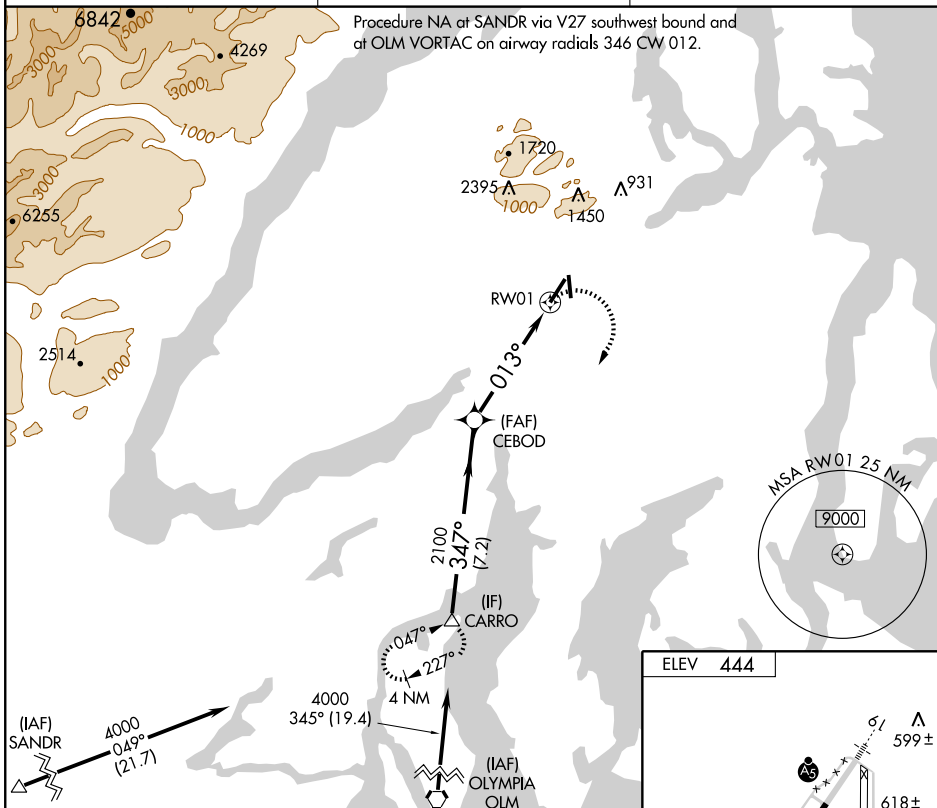
▼ Circling NA for Cat. D west of Rwy 1-19.  
▲ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
When local altimeter setting not received, use Seattle-Tacoma  
Intl altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climbing right turn to 4000 direct  
CARRO and hold, continue climb-in-hold to 4000.

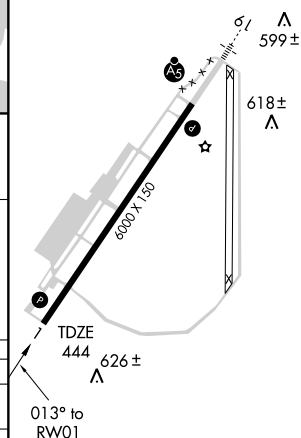
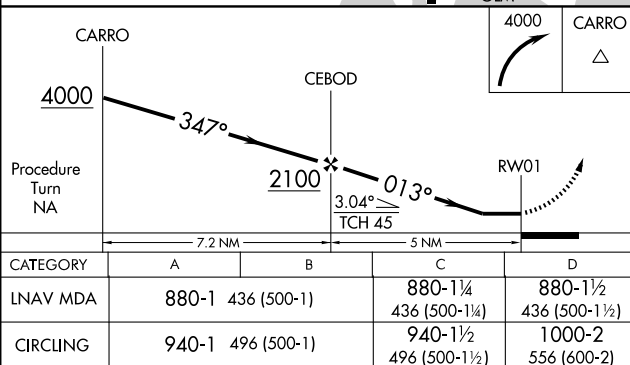
AWOS-3  
**121.2**

SEATTLE APP CON  
**127.1 254.4**

UNICOM  
**123.05 (CTAF) 0**



ELEV **444**



HIRL Rwy 1-19

BREMERTON, WASHINGTON

Orig-A 08213

47°29'N-122°46'W

BREMERTON NATIONAL (PWT)  
RNAV (GPS) RWY 1

WAAS CH <b>61106</b> <b>W19A</b>	APP CRS <b>193°</b>	Rwy Idg TDZE Apt Elev	<b>6000</b> <b>441</b> <b>444</b>
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# RNAV (GPS) RWY 19

## BREMERTON NATIONAL (PWT)

**▼** Circling NA for Cat. D west of Rwy 1-19. DME/DME RNP-0.3 NA.  
**▲** When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase DA to 808 feet and all MDAs 60 feet, increase LPV visibility all Cats. 1/2 mile. Inoperative table does not apply to LNAV Cat. A and B. VDP NA when using Seattle-Tacoma Intl altimeter setting. For inoperative MALSR increase LPV visibility all Cats. 1/2 mile. Inoperative table does not apply to LNAV Cat. A and B.

MALSR



MISSED APPROACH: Climb to 4000 direct CEBOD and via 167° track to CARRO and hold, continue climb-in-hold to 4000.

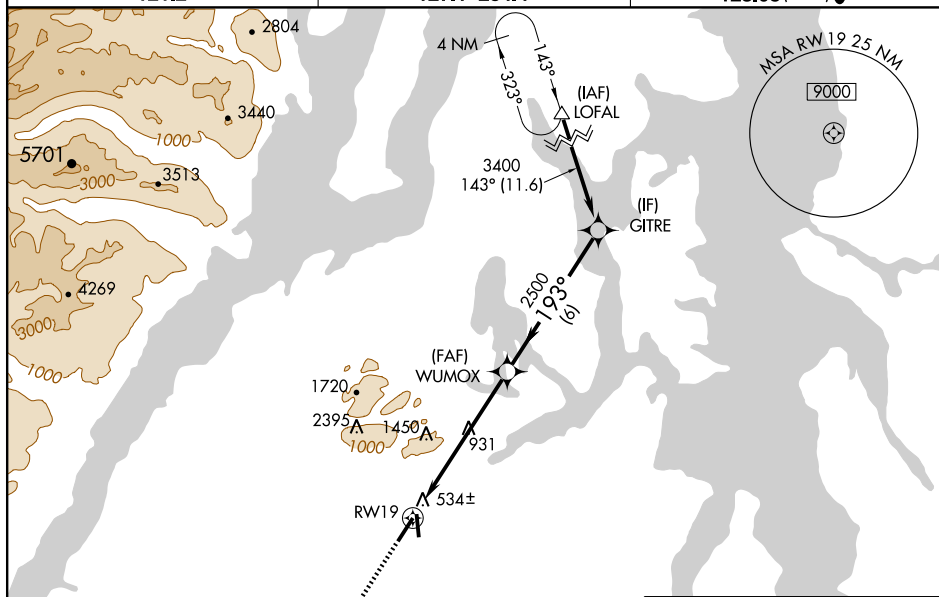
AWOS-3

**121.2**

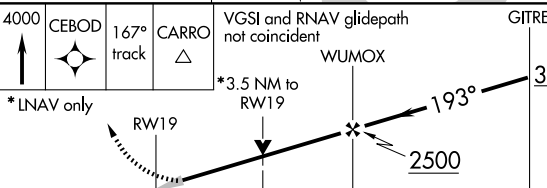
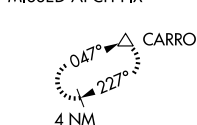
SEATTLE APP CON

**127.1 254.4**

UNICOM

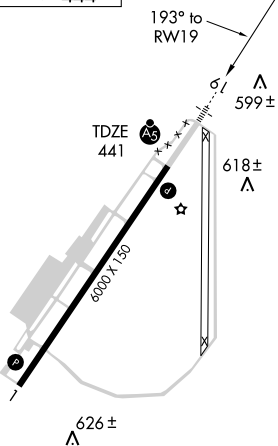
**123.05 (CTAF) ①**

MISSED APCH FIX



CATEGORY	A	B	C	D
LPV DA	763-1/2	322 (400-1/2)		
LNAV MDA	1600-1/4 1159 (1200-1/4)	1600-1/2 1159 (1200-1/2)	1600-2 1/2	1159 (1200-2 1/2)
CIRCLING	1600-1/4 1156 (1200-1/4)	1600-1/2 1156 (1200-1/2)	1600-3	1156 (1200-3)

ELEV 444



HIRL Rwy 1-19

**BURLINGTON/MOUNT VERNON****SKAGIT RGNL** (BVS) 3 W UTC-8(-7DT) N48°28.25' W122°25.25'

SEATTLE

144 B S4 FUEL 100LL, JET A TPA—See Remarks NOTAM FILE BVS

H-1B, L-1E

**Rwy 10-28:** H5477X100 (ASPH) S-19 MIRL 0.8% up W

IAP

**Rwy 10:** REIL. VASI(V4L)—GA 3.0° TCH 40'.**Rwy 28:** REIL. VASI(V2L)—GA 3.5° TCH 46'.**Rwy 04-22:** H3000X60 (ASPH) S-12.5 LIRL 0.4% up NE**Rwy 04:** PAPI(P2L)—GA 3.0° TCH 40'.**Rwy 22:** PAPI(P2L)—GA 3.0° TCH 40'.

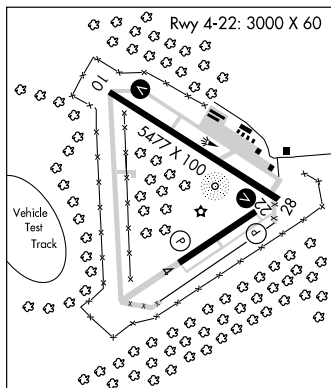
**AIRPORT REMARKS:** Attended Mon-Fri 1400-0100Z. Deer and birds on and in/rwys. Helicopter training ops on aprt with autorotations on rwy. Use of Twy G by acft with wingspan 49' or greater prohibited when Rwy 04-22 in use. TPA-1144(1000) Ultralight TPA-644(500). Rwy 04-22 compass rose in stopway SW end. ACTIVATE MIRL Rwy 10-28, LIRL Rwy 04-22, VASI Rwy 10 and Rwy 28, and REIL Rwy 10 and Rwy 28—CTAF. PAPI Rwy 04 and Rwy 22 opr continuously.

**WEATHER DATA SOURCES:** AWOS-3 121.125 (360) 757-7767.**COMMUNICATIONS:** CTAF/UNICOM 123.075**(R) WHIDBEY APP/DEP CON** 120.7**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA.**TATOOSH (H) VORTACW** 112.2 TOU Chan 59 N48°17.99'

W124°37.62' 061° 88.8 NM to fld. 1652/22E.

**HIWAS.****SKAGIT/BAY VIEW NDB (MHW)** 240 BVS N48°28.12' W122°25.10' at fld. NOTAM FILE BVS.

NDB unusable 350°-030° byd 20NM.

**CAMANO ISLAND AIRFIELD** (See STANWOOD)**CAMAS****GROVE FLD** (1W1) 3 N UTC-8(-7DT) N45°37.67' W122°24.26'

SEATTLE

429 B S4 FUEL 100 NOTAM FILE SEA

**Rwy 07-25:** H2710X40 (ASPH) MIRL (NSTD)**Rwy 07:** PAPI(P2L)—GA 5.0°. Thld dspcd 493'. Trees.**Rwy 25:** PAPI(P2L)—GA 5.0°. Thld dspcd 413'. Trees.

**AIRPORT REMARKS:** Unattended. For fuel after hrs credit card lock. Noise abatement procedures in effect, etc Port of Camas-Washougal at 360-835-2196. Rwy 07-25 has buildings, telephone poles and trees encroaching in safety areas. Rwy 07 and Rwy 25 have 4 thld stripes falsely indicating 60' width. NSTD MIRL Rwy 07 and Rwy 25 dspcd thlds unlighted. ACTIVATE rotating bcn and MIRL Rwy 07-25—CTAF.

**COMMUNICATIONS:** CTAF 122.9**PORTLAND CLNC DEL** 121.65**CANYON** N47°40.62' W117°27.01' NOTAM FILE GEG.

SEATTLE

**NDB (MHW)** 388 CRK 205° 4.8 NM to Spokane Intl.**CARNEY** N47°24.63' W122°50.33' NOTAM FILE PWT.

SEATTLE

**NDB (MHW)** 274 CAN 012° 5.7 NM to Bremerton National.

L-1D

NDB unusable 030°-310° beyond 15 NM.

**CASHMERE-DRYDEN** (8S2) 0 SW UTC-8(-7DT) N47°30.89' W120°29.08'

SEATTLE

858 B S4 NOTAM FILE SEA

**Rwy 07-25:** H1800X50 (ASPH) S-8 MIRL**Rwy 07:** Fence. **Rwy 25:** PAPI(P2L)—GA 3.0°. Thld dspcd 182'. Trees.

**AIRPORT REMARKS:** Unattended. Ground vehicles and pedestrians use twy for hanger and residential access. Exit rwy at twys only. Radio control model activity permitted on W end of aprt. ACTIVATE MIRL Rwy 07-25—121.7.

**COMMUNICATIONS:** CTAF 122.9**CEDARS NORTH AIRPARK** (See BATTLE GROUND)

NDB BVS <b><u>240</u></b>	APP CRS <b>112°</b>	Rwy Idg TDZE Apt Elev	<b>5477</b> <b>144</b> <b>144</b>
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NDB RWY 10

BURLINGTON/MOUNT VERNON/ SKAGIT RGNL (BVS)

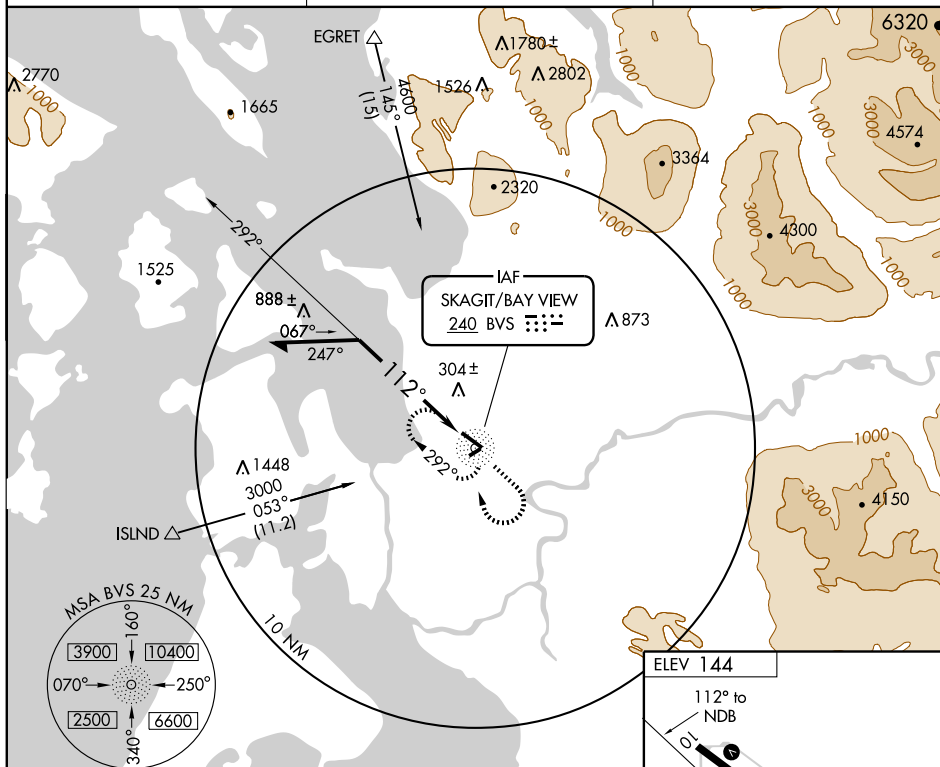
<b>T</b>	Visibility reduction by helicopters NA.
<b>A</b>	When local altimeter setting not received, use Friday Harbor altimeter setting and increase all MDA 80 feet.

**MISSED APPROACH:** Climb to 2100 via 112° bearing from BVS NDB then climbing right turn to 3000 direct BVS NDB and hold.

AWOS-3  
121.125

WHIDBEY APP CON  
120.7 270.8

UNICOM  
123.075 (CTAF) **L**



Remain  
within 10 NM

NDB

2900

292°

\_\_\_\_\_

[illegible]

L

DVS 112

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	<u>2</u>
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40	
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[illegible]

1

49 

22 x 28

[illegible]

CATEGORY	A	B	C	D
S-10	1400-1¼ 1256 (1300-1¼)	1400-1½ 1256 (1300-1½)	1400-3	1256 (1300-3)
CIRCLING	1400-1¼ 1256 (1300-1¼)	1400-1½ 1256 (1300-1½)	1400-3	1256 (1300-3)

LIRL Rwy 4-22 **L**  
REIL Rwy 10 and 28 **L**  
MIRL Rwy 10-28 **L**

WAAS CH <b>53500</b> <b>W10A</b>	APP CRS <b>105°</b>	Rwy Idg TDZE <b>144</b> Apt Elev <b>144</b>	<b>5477</b>
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## RNAV (GPS) RWY 10

BURLINGTON/MOUNT VERNON/SKAGIT RGNL (BVS)

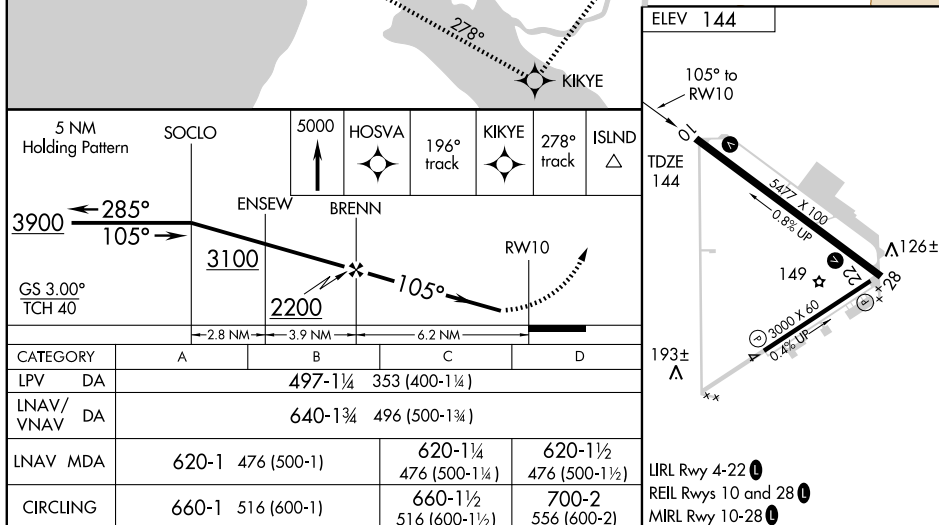
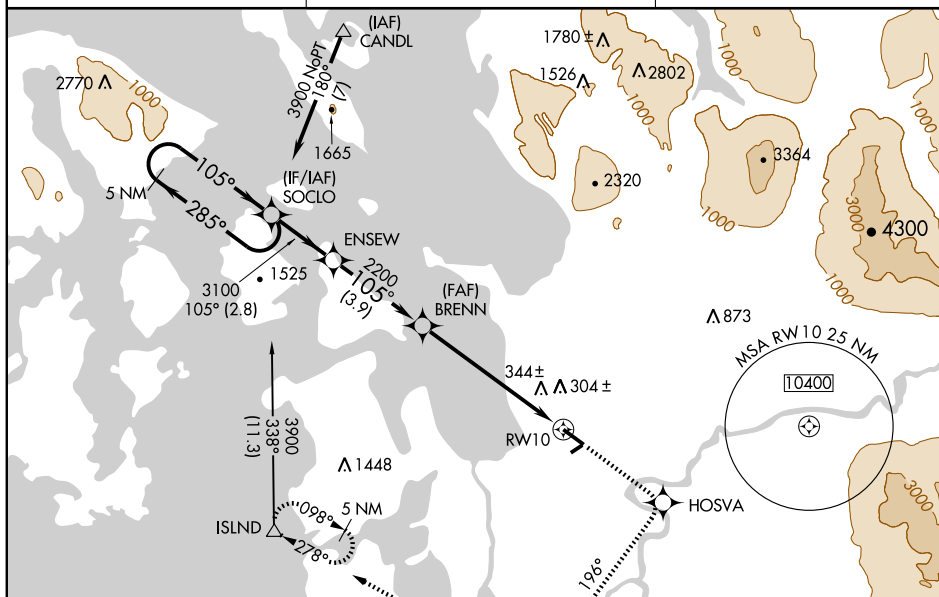
**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV NA when using Friday Harbor altimeter setting. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all DA/MDA 80 feet, increase LPV and LNAV/VNAV all Cats, LNAV Cats C and D visibilities ¼ mile.

**MISSED APPROACH:** Climb to 5000 direct HOSVA and via 196° track to KIKYE and via 278° track to ISLND and hold, continue climb-in-hold to 5000.

AWOS-3  
**121.125**

WHIDBEY APP CON  
**120.7 270.8**

UNICOM  
**123.075 (CTAF) ①**



BURLINGTON/MOUNT VERNON, WASHINGTON

Amdt 1 10042

BURLINGTON/MOUNT VERNON/SKAGIT RGNL (BVS)

48°28'N-122°25'W

RNAV (GPS) RWY 10

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH <b>70407</b> <b>W28A</b>	APP CRS <b>286°</b>	Rwy Idg TDZE <b>126</b> Apt Elev <b>144</b>	<b>5477</b>
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## RNAV (GPS) RWY 28

BURLINGTON/MOUNT VERNON/SKAGIT RGNL (BVS)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP: 0.3 NA. Visibility reduction by helicopters NA. VDP and Baro-VNAV NA when using Friday Harbor altimeter setting. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all DA/MDA 80 feet, increase LPV and LNAV/VNAV all Cats, LNAV Cats C and D visibilities ¼ mile.

MISSED APPROACH: Climb to 4000 direct SOCLO and hold, continue climb-in-hold to 4000.

AWOS-3  
**121.125**

WHIDBEY APP CON  
**120.7 270.8**

UNICOM  
**123.075 (CTAF) 0**

MISSED APCH FIX



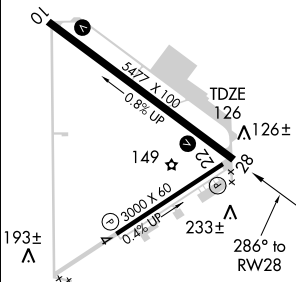
MSA RW28 25 NM

10600

ELEV 144

Procedure NA for arrivals at PAE VOR/DME via V23 southeast bound.

PAINE PAE



LURL Rwy 4-22 0

REIL Rws 10 and 28 0

MIRL Rwy 10-28 0

BURLINGTON/MOUNT VERNON, WASHINGTON

Orig-A 10042

BURLINGTON/MOUNT VERNON/SKAGIT RGNL (BVS)

48°28'N-122°25'W

## RNAV (GPS) RWY 28

4000 SOCLO		VGSI and RNAV glidepath not coincident				FOBSO	
*LNAV only		*1.2 NM to RW28		CEXBI 4.2 NM to RW28		TOKSE 7.1 NM to RW28	
RW28		1480*		2440*		3100	
1.2		3 NM		2.9 NM		2 NM	
CATEGORY		A		B		C	
LPV DA		421-1¼		295 (300-1¼)			
LNAV/VNAV DA		503-1½		377 (400-1½)			
LNAV MDA		600-1 474 (500-1)		600-1¼ 474 (500-1¼)		600-1½ 474 (500-1½)	
CIRCLING		660-1 516 (600-1)		660-1½ 516 (600-1½)		700-2 556 (600-2)	



**CHEHALIS-CENTRALIA** (CLS) 1 W UTC-8(-7DT) N46°40.62' W122°58.97'

176 B S4 FUEL 100LL, JET A OX 4 NOTAM FILE SEA

RWY 16-34: H5000X150 (CONC) S-30, D-30, 2D-85 MIRL

RWY 16: REIL. PAPI(P4L)—GA 4.0° TCH 51'. Trees. Rgt tfc.

RWY 34: REIL. VASI(V2L)—GA 4.5° TCH 35'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1500-0100Z+. Fuel avbl 24 hrs by credit card only. No debit cards. Possible wildlife on rwys.

ACTIVATE MIRL Rwy 16-34 and REIL Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.025 (360) 740-5164.

COMMUNICATIONS: CTAF/UNICOM 122.8

® SEATTLE APP CON 121.1

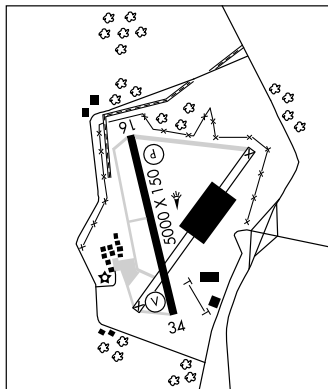
SEATTLE CENTER DEP CON 124.2

RADIO AIDS TO NAVIGATION: NOTAM FILE OLM.

OLYMPIA (H) VORTACW 113.4 OLM Chan 81 N46°58.30'

W122°54.11' 172° 18.0 NM to fld. 200/19E.

HIWAS.

SEATTLE  
H-1B, L-1C  
IAP**CHELAN****LAKE CHELAN** (S1Ø) 3 NE UTC-8(-7DT) N47°51.96' W119°56.56'

1263 B S2 FUEL 100LL, JET A NOTAM FILE SEA

RWY 02-20: H3503X60 (ASPH) S-12 MIRL

RWY 02: Thld dspcd 447'. Road. Rgt tfc.

RWY 20: PAPI(P2L). Thld dspcd 197'. Trees.

AIRPORT REMARKS: Attended continuously. Self-service fuel avbl 24 hrs. ACTIVATE MIRL Rwy 02-20 CTAF 122.9.

COMMUNICATIONS: CTAF/UNICOM 122.95

RADIO AIDS TO NAVIGATION: NOTAM FILE EPH.

EPHRATA (H) VORTACW 112.6 EPH Chan 73 N47°22.68' W119°25.44' 303° 36.1 NM to fld. 1250/21E.

SEATTLE  
L-13A**CHEWELAH****SAND CANYON** (1S9) 2 N UTC-8(-7DT) N48°18.85' W117°44.60'

2084 B NOTAM FILE SEA

RWY 17-35: H3446X48 (ASPH) MIRL

RWY 17: PAPI(P2R)—GA 4.0° TCH 63'. Thld dspcd 230'. Tree. Rgt tfc.

RWY 35: PAPI(P2L)—GA 3.0°. Thld dspcd 101'.

AIRPORT REMARKS: Unattended. Deer and wildlife on and invof arpt.

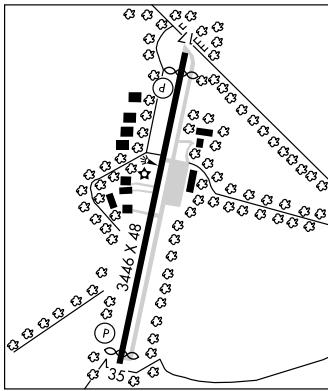
ACTIVATE MIRL Rwy 17-35—CTAF. PAPI Rwy 17 and Rwy 35 operate continuously.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE GEG.

SPOKANE (H) VORTACW 115.5 GEG Chan 102 N47°33.90'

W117°37.61' 333° 45.2 NM to fld. 2756/21E. HIWAS.

SEATTLE  
L-13B

## RNAV (GPS) RWY 16

CHEHALIS-CENTRALIA (CLS)

APP CRS **160°**  
 Rwy Idg **5000**  
 TDZE **173**  
 Apt Elev **174**



DME/DME RNP-0.3 NA.



NA  
 Circling NA northeast of Rwy 16-34.  
 Circling NA at night.

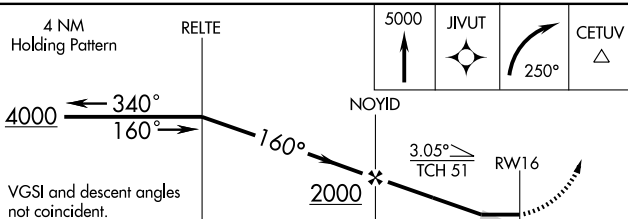
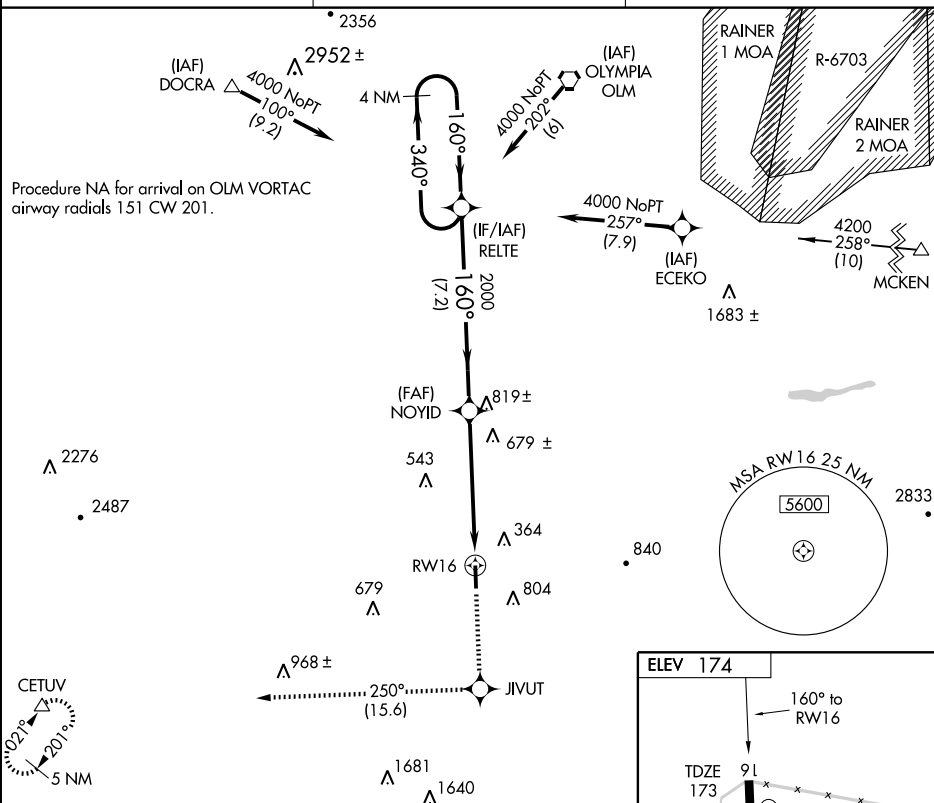
MISSED APPROACH: Climb to 5000 direct JIVUT and right turn via 250° track to CETUV and hold, continue climb-in-hold to 5000.

AWOS-3  
**118.025**

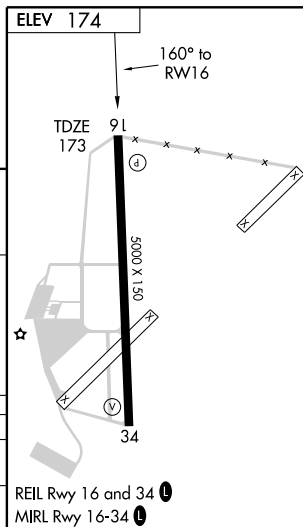
SEATTLE APP CON  
**121.1 377.15**

UNICOM  
**122.8 (CTAF) 0**

Procedure NA for arrival on OLM VORTAC  
 airway radials 151 CW 201.



CATEGORY	A	B	C	D
LNNAV MDA	980-1 807 (900-1)	980-1½ 807 (900-1½)	980-2½ 807 (900-2½)	980-2½ 807 (900-2½)
CIRCLING	980-1 806 (900-1)	980-1½ 806 (900-1½)	1080-2¾ 906 (1000-2¾)	1140-3 966 (1000-3)



**DEER PARK** (DEW) 3 NE UTC-8(-7DT) N47°58.02' W117°25.72'  
 2211 B S4 FUEL 100LL, JET A TPA—See Remarks NOTAM FILE DEW  
 RWY 16-34: H6100X75 (ASPH) S-21 MIRL 0.4% up NW  
 RWY 16: REIL. PAPI (P4L)—GA 3.5° TCH 38'. Trees.  
 RWY 34: REIL. PAPI (P4L)—GA 3.0° TCH 40'.  
 RWY 04-22: H3200X60 (ASPH) S-12.5

**AIRPORT REMARKS:** Attended Apr-Oct 1600-0100Z†, Nov-Mar 1800-0000Z†. 100LL avbl 24 hrs credit card self service facility. Call ahead for Jet A svc 509-276-3379. Rwy 04-22 heavy glider activity weekends. Monitor glider traffic on 123.3 abv 5000' MSL. Glider pattern TPA 3211(1000). Model airplane activity on arpt. Farming opr active on land adjacent to rws. Deer and coyotes on and in/ov runways. 175' twr 2000' W of Rwy 16-34. Noise abatement procedures in effect ctc arpt manager 509-276-3379. Rwy 16 preferred calm wind rwy. ACTIVATE MIRL Rwy 16-34—CTAF.

**WEATHER DATA SOURCES:** ASOS 135.175 (509) 276-2303.

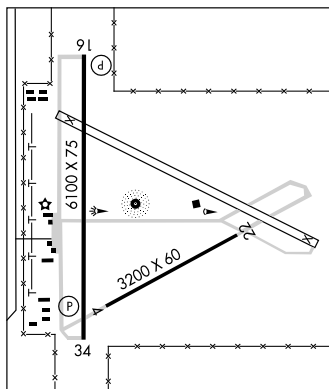
**COMMUNICATIONS:** CTAF/UNICOM 123.0

® SPOKANE APP/DEP CON 123.75

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GEG.

SPOKANE (H) VORTACW 115.5 GEG Chan 102 N47°33.90' W117°37.61' 357° 25.4 NM to fld. 2756/21E. HIWAS.

NDB (MHW) 365 DPY N47°58.07' W117°25.58' at fld. NOTAM FILE DEW. NDB unmonitored.



SEATTLE  
 H-1C, L-13B  
 IAP

**DESERT AIRE** (See MATTAWA)

**DE VERE FLD** (See CLE ELUM)

**DONNY** N46°31.54' W120°22.33'. NOTAM FILE YKM.  
 NDB (LOM) 371 YK 274° 7.6 NM to Yakima Air Terminal/McAllister Fld.

SEATTLE

**DOROTHY SCOTT** (See OROVILLE)

**DUNEZ** N46°20.29' W119°00.75'. NOTAM FILE PSC.  
 NDB (LOM) 331 PS 205° 6.3 NM to Tri-Cities. Unmonitored when twr clsd.

SEATTLE

**EASTON STATE** (ESW) 2 N UTC-8(-7DT) N47°15.25' W121°11.13'

SEATTLE

2226 NOTAM FILE SEA

RWY 09-27: 2640X100 (TURF) MIRL

RWY 09: Trees RWY 27: Trees

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Oct 1 thru Jun 1. Wind cone mounted on 50' self supporting tower. Vehicles, pedestrians and wildlife on and in/ov arpt.

**COMMUNICATIONS:** CTAF 122.9

## EASTSOUND

**ORCAS ISLAND** (ORS) 1 N UTC-8(-7DT) N48°42.50' W122°54.64'

SEATTLE

31 B S3 FUEL 100LL TPA—1031(1000) NOTAM FILE ORS

L-1E

RWY 16-34: H2900X60 (ASPH-AFSC) S-12.5 MIRL

IAP

RWY 16: REIL. VASI(V4L)—GA 2.9° TCH 35'. RWY 34: REIL. PAPI(P2L)—GA 4.0° TCH 28'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended 1600-0030Z†. Self svc 24 hr fuel avbl with credit card. Deer on and in/ov rwy. Noise abatement procedures in effect, ctc arpt manager 360-376-5285. Additional transient tiedowns south of segmented circle. PAPI baffled W of centerline, lateral coverage has been narrowed to avoid obstacles, during decent close alignment to rwy centerline is necessary. ACTIVATE VASI Rwy 16, REIL Rwy 16 and Rwy 34 and twy lgtS—128.25.

**WEATHER DATA SOURCES:** AWOS-3 135.425 (360) 376-6045.

**COMMUNICATIONS:** CTAF 128.25

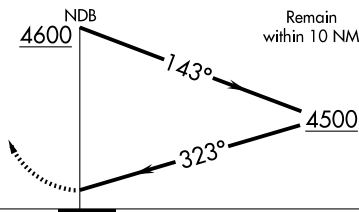
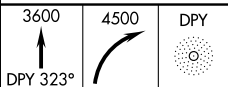
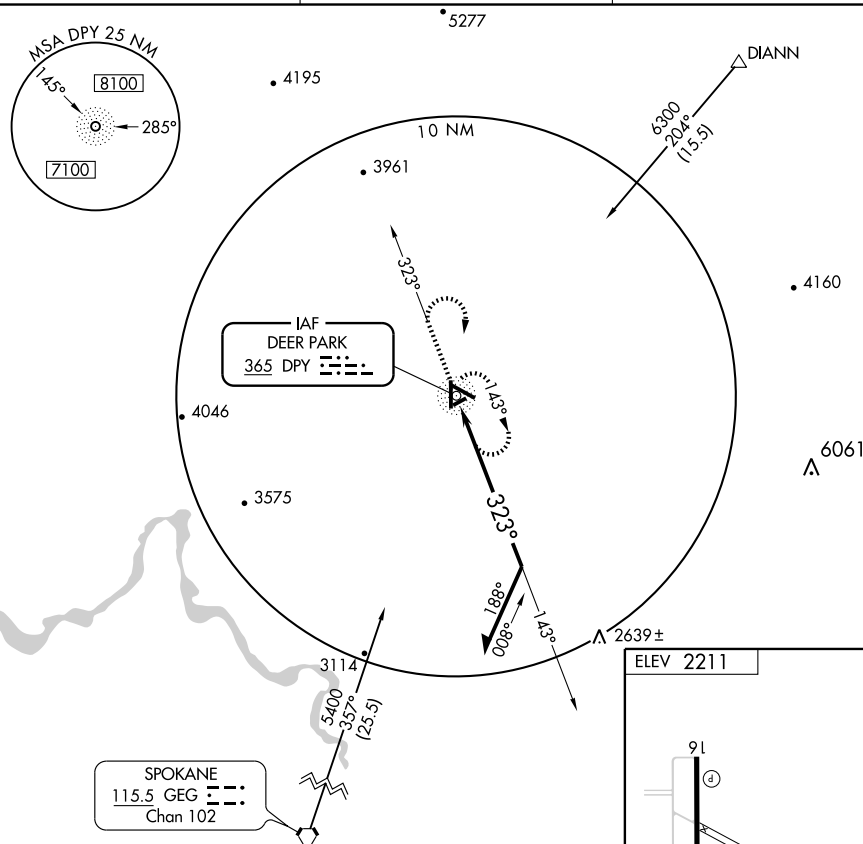
VICTORIA NORTH APP/DEP CON 132.7

WHIDBEY SOUTH APP/DEP CON 118.2

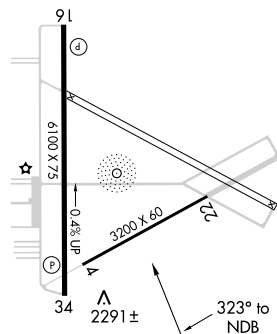
NDB DPY  
**365**APP CRS  
**323°**Rwy Idg  
TDZE  
Apt Elev**N/A**  
**N/A**  
**2211****NDB-A**  
DEER PARK (DEW)

**▼** Circling NA west of Rwy 16-34.  
**▲ NA** When local altimeter setting not received, use Spokane Intl altimeter setting and increase all MDAs 80 feet and all visibilities ½ mile.

**MISSED APPROACH:** Climb to 3600 via 323° bearing from DPY NDB then climbing right turn to 4500 direct DPY NDB and hold.

ASOS  
**135.175**SPOKANE APP CON  
**123.75 282.25**UNICOM  
**123.0 (CTAF) 0**

ELEV 2211



CATEGORY	A	B	C	D
CIRCLING	3000-1 789 (800-1)	3000-1¼ 789 (800-1¼)	3000-2¼ 789 (800-2¼)	3000-2½ 789 (800-2½)

REIL Rwy 16 and 34  
MIRL Rwy 16-34 0

WAAS CH <b>61306</b> <b>W34A</b>	APP CRS <b>344°</b>	Rwy Idg TDZE Apt Elev	<b>6100</b> <b>2201</b> <b>2211</b>
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# RNAV (GPS) RWY 34

DEER PARK (DEW)

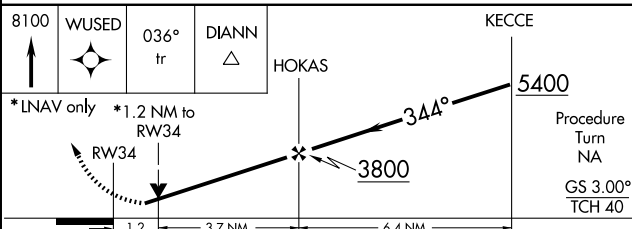
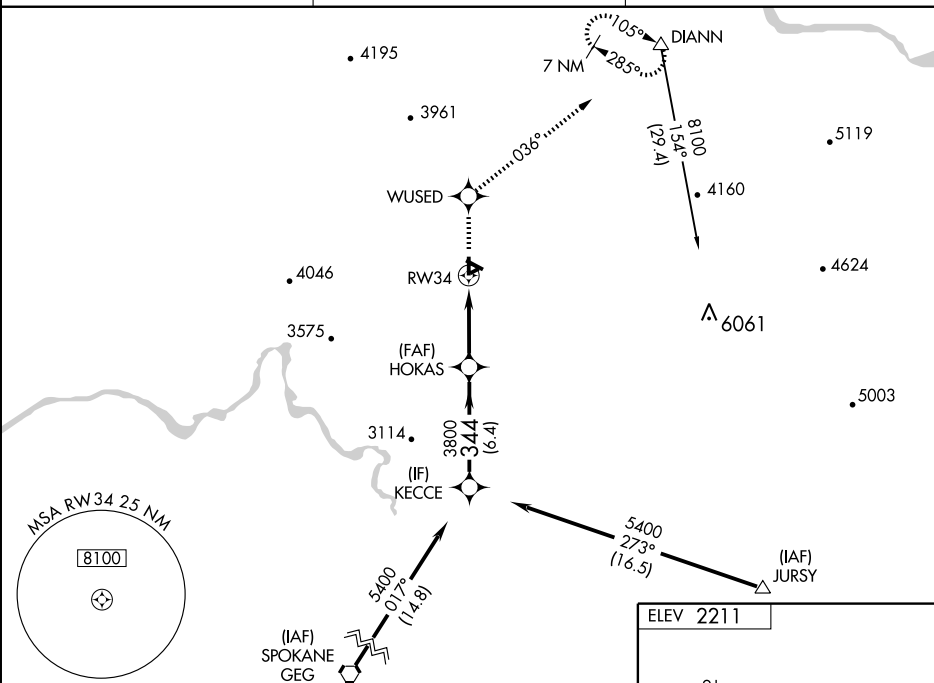
**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F).  
**▲** When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA/MDAs 80 feet and all visibilities ¼ mile. Circling not authorized west of Rwy 16-34. DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Spokane Intl altimeter setting. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 8100 direct WUSED and via 036° track to DIANN and hold, continue climb-in- hold to 8100.

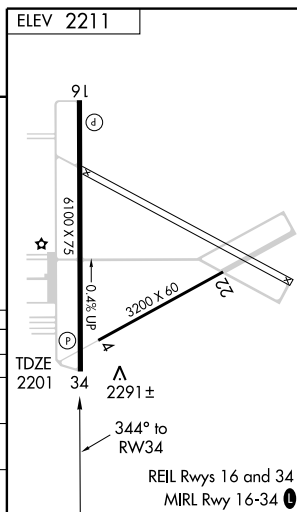
ASOS  
**135.175**

SPOKANE APP CON  
**123.75 282.25**

UNICOM  
**123.0 (CTAF) 0**



CATEGORY	A	B	C	D
LPV DA	2466-1		265 (300-1)	
LNAV/VNAV DA	2551-1¼		350 (400-1¼)	
LNAV MDA	2600-1		399 (400-1)	
CIRCLING	2700-1 489 (500-1)		2700-1½ 489 (500-1½)	
			2780-2 569 (600-2)	



**DEER PARK** (DEW) 3 NE UTC-8(-7DT) N47°58.02' W117°25.72'  
 2211 B S4 **FUEL** 100LL, JET A TPA-See Remarks NOTAM FILE DEW  
**RWY 16-34:** H6100X75 (ASPH) S-21 MIRL 0.4% up NW  
**RWY 16:** REIL. PAPI (P4L)-GA 3.5° TCH 38'. Trees.  
**RWY 34:** REIL. PAPI(P4L)-GA 3.0° TCH 40'.  
**RWY 04-22:** H3200X60 (ASPH) S-12.5

SEATTLE  
H-1C, L-13B  
IAP

**AIRPORT REMARKS:** Attended Apr–Oct 1600–0100Z†, Nov–Mar 1800–0000Z†. 100LL avbl 24 hrs credit card self service facility. Call ahead for Jet A svc 509–276–3379. Rwy 04–22 heavy glider activity weekends. Monitor glider traffic on 123.3 abv 5000' MSL. Glider pattern TPA 3211(1000). Model airplane activity on arpt. Farming opr active on land adjacent to rwy. Deer and coyotes on and in/ovf runways. 175' twr 2000' W of Rwy 16–34. Noise abatement procedures in effect ctc arpt manager 509–276–3379. Rwy 16 preferred calm wind rwy. ACTIVATE MIRL Rwy 16–34—CTAF.

**WEATHER DATA SOURCES:** ASOS 135.175 (509) 276-2303.

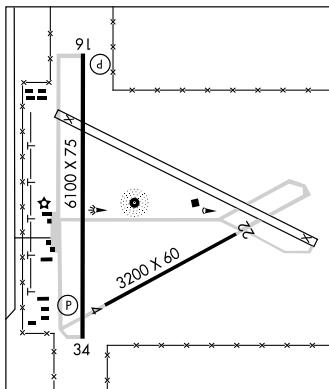
**COMMUNICATIONS: CTAF/UNICOM 123.0**

® SPOKANE APP/DEP CON 123.75

RADIO AIDS TO NAVIGATION: NOTAM FILE GEG.

**SPOKANE (H) VORTACW** 115.5 GEG Chan 102 N47°33.90'  
W117°37.61' 357° 25.4 NM to fld. 2756/21E. **HIWAS**

**NDB (MHW) 365** DPY N47°58.07' W117°25.58' at fld. NOTAM FILE DEW. NDB unmonitored.



**DESERT AIRE** (See MATTAWA)

DE VERE FLD (See CLE ELUM)

**DONNY** N46°31.54' W120°22.33'. NOTAM FILE YKM.  
NDB (LOM) 371 YK 274° 7.6 NM to Yakima Air Terminal/McAllister Fld.

## SEATTLE

**DOROTHY SCOTT** (See OROVILLE)

**DUNEZ** N46°20.29' W119°00.75'. NOTAM FILE PSC.  
NDB (LOM) 331 PS 205° 6.3 NM to Tri-Cities. Unmonitored when twr clsd.

SEATTLE

EASTON STATE (ESW) 2 N UTC-8(-7DT) N47°15.25' W121°11.13'

SEATTLE

2226 NOTAM FILE SEA  
RWY 09-27: 2640X100 (TURF) MIRL  
RWY 09: Trees RWY 27: Trees

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Oct 1 thru Jun 1. Wind cone mounted on 50' self supporting tower. Vehicles, pedestrians and wildlife on and in/ov arpt.

**COMMUNICATIONS: CTAF 122.9**

## EASTSOUND

**ORCAS ISLAND** (ORS) 1 N UTC-8(-7DT) N48°42.50' W122°54.64'

## SEATTLE

31 B S3 **FUEL** 100LL TPA—1031(1000) NOTAM FILE ORS  
RWY 16-34: H2900X60 (ASPH-AFSC) S-12.5 MIRL

RWY 16: REIL. VASI(V4L)—GA 2.9° TCH 35'. RWY 34: REIL. PAPI(P2L)—GA 4.0° TCH 28'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended 1600-0030Z. Self svc 24 hr fuel avbl with credit card. Deer on and invof rwy. Noise abatement procedures in effect, ctc arpt manager 360-376-5285. Additional transient tiedowns south of segmented circle. PAPI baffled W of centerline, lateral coverage has been narrowed to avoid obstacles, during decent close alignment to rwy centerline is necessary. ACTIVATE VASI Rwy 16, REIL Rwy 16 and Rwy 34 and twy lghts—128.25.

**WEATHER DATA SOURCES:** AWOS-3 135.425 (360) 376-6045.

**COMMUNICATIONS: CTAF 128.25**

VICTORIA NORTH APP/DEP CON 132.7

WHIDBEY SOUTH APP/DEP CON 118.2

L-1E  
IAP

APP CRS <b>343°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>31</b>
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**RNAV (GPS)-A**

EASTSOUND/ORCAS ISLAND (ORS)

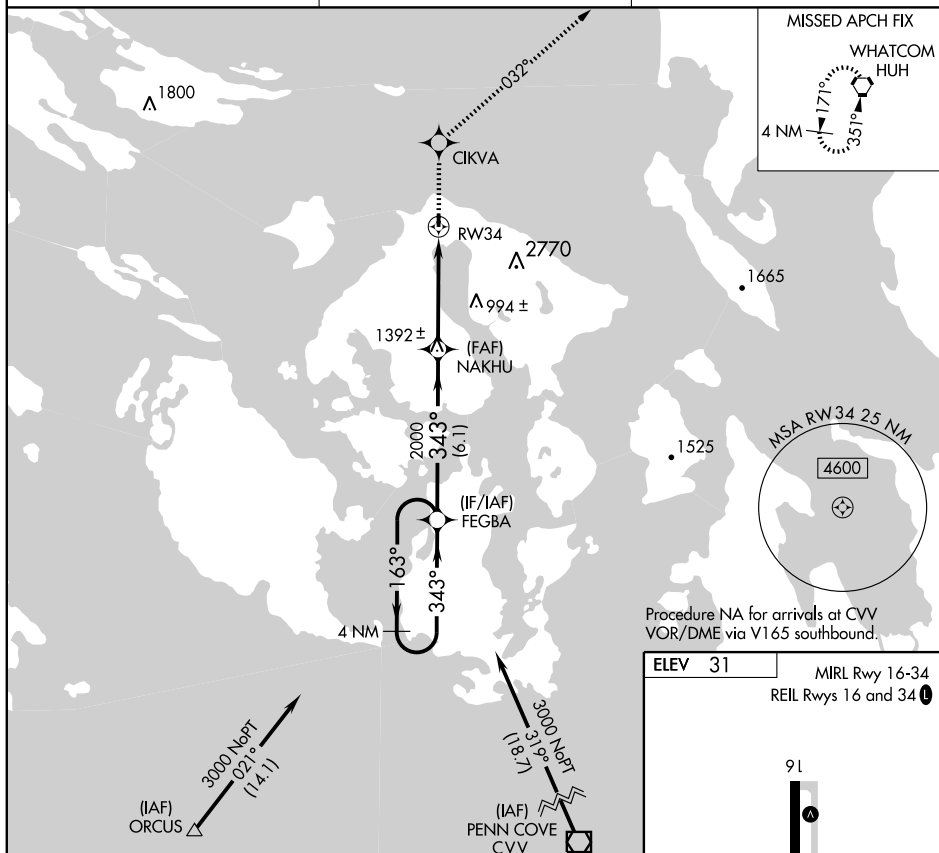
**▼** DME/DME RNP- 0.3 NA. Procedure NA at night.  
**▲** When local altimeter setting not received, use Friday Harbor altimeter setting and increase MDA 40 feet.

MISSED APPROACH: Climb to 2000 direct CIKVA and via track 032° to HUH VORTAC and hold.

AWOS-3  
**135.425**

WHIDBEY APP CON  
**118.2 285.65**

CTAF  
**128.25 0**

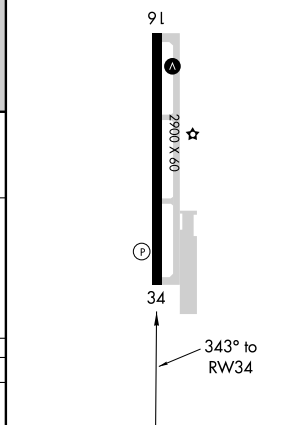
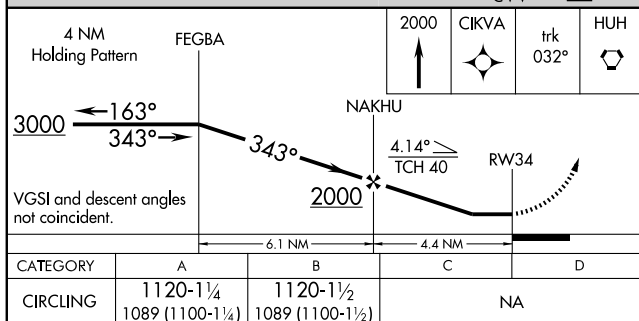


Procedure NA for arrivals at CVV  
VOR/DME via V165 southbound.

ELEV 31

MIRL Rwy 16-34

REIL Rwy 16 and 34



EASTSOUND, WASHINGTON

Orig 22OCT09

EASTSOUND/ORCAS ISLAND (ORS)

48°43'N-122°55'W

**RNAV (GPS)-A**

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

**ELLENSBURG****BOWERS FLD**

(ELN) 2 N UTC-8(-7DT) N47°01.98' W120°31.84'

1764 B S4 **FUEL** 100LL, JET A TPA-2598(834) NOTAM FILE ELN**RWY 07-25:** H5590X150 (ASPH) S-28 0.8% up E**RWY 07:** Tree. **RWY 25:** P-line.**RWY 11-29:** H4301X150 (CONC) S-35, D-57, 2D-100

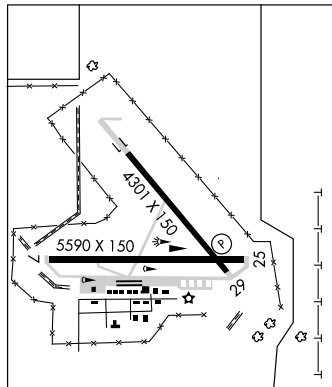
MIRL 0.4% up NW

**RWY 29:** REIL. PAPI(P2R)-GA 3.0° TCH 40'.**AIRPORT REMARKS:** Attended Mon-Fri 1500-0300Z±, Sat-Sun 1500-0200Z±. Rwy 07-25 CLOSED Dec 15-Feb 28, no maintenance avail. Rwy 07-25 has weeds growing through cracks in pavement first 2000'. **ACTIVATE MIRL Rwy 11-29-123.0.****WEATHER DATA SOURCES:** ASOS 118.375 (509) 925-2040. **HIWAS** 117.9 ELN.**COMMUNICATIONS: CTAF/UNICOM:** 123.0**ELLENSBURG RCO** 122.2 (SEATTLE RADIO)**SEATTLE CENTER APP/DEP CON** 132.6**RADIO AIDS TO NAVIGATION:** NOTAM FILE ELN.**ELLENSBURG (H) VORTACW** 117.9 ELN Chan 126 N47°01.46'W120°27.50' 259° 3.0 NM to fld. 1770/21E. **HIWAS.**

SEATTLE

H-1C, L-13A

IAP

**ELMA MUNI**

(4W8) 1 SW UTC-8(-7DT) N46°59.43' W123°25.78'

35 B TPA-835(800) NOTAM FILE SEA

**RWY 07-25:** H2280X30 (ASPH) MIRL (NSTD)**RWY 07:** Trees. Rgt tfc. **RWY 25:** Thld dsplcd 180' Trees.**AIRPORT REMARKS:** Unattended. Rwy 07-25 NSTD MIRL. Rwy 25 dsplcd thld unlgtd, 2095' of Rwy 07-25 avl for ngtd ops. Rwy 07-25 disregard white X's on rwy. Rwy 07-25 very narrow faded centerline stripe, rwy 1D NSTD dimensions. **ACTIVATE NSTD MIRL Rwy 07-25-CTAF.****COMMUNICATIONS: CTAF/UNICOM** 122.8

SEATTLE

**ELWHA**

N48°09.01' W123°40.22'. NOTAM FILE CLM.

**NDB (MHW/LOM)** 515 CL 083° 7.1 NM to William R. Fairchild Intl.

NDB unusable 100°-235° beyond 12 NM.

SEATTLE

L-1E



APP CRS	Rwy ldg	<b>5590</b>
<b>267°</b>	TDZE	<b>1755</b>
	Apt Elev	<b>1764</b>

# RNAV (GPS) RWY 25

ELLENSBURG/ BOWERS FIELD (ELN)

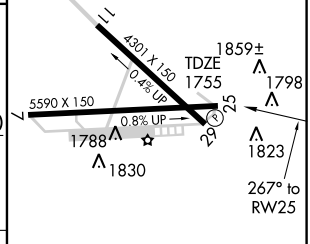
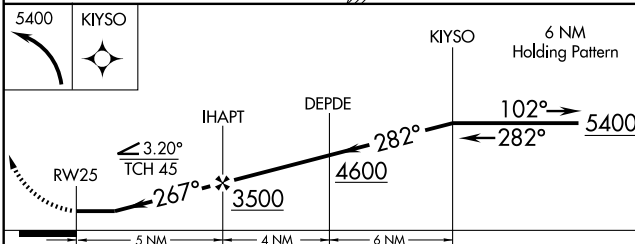
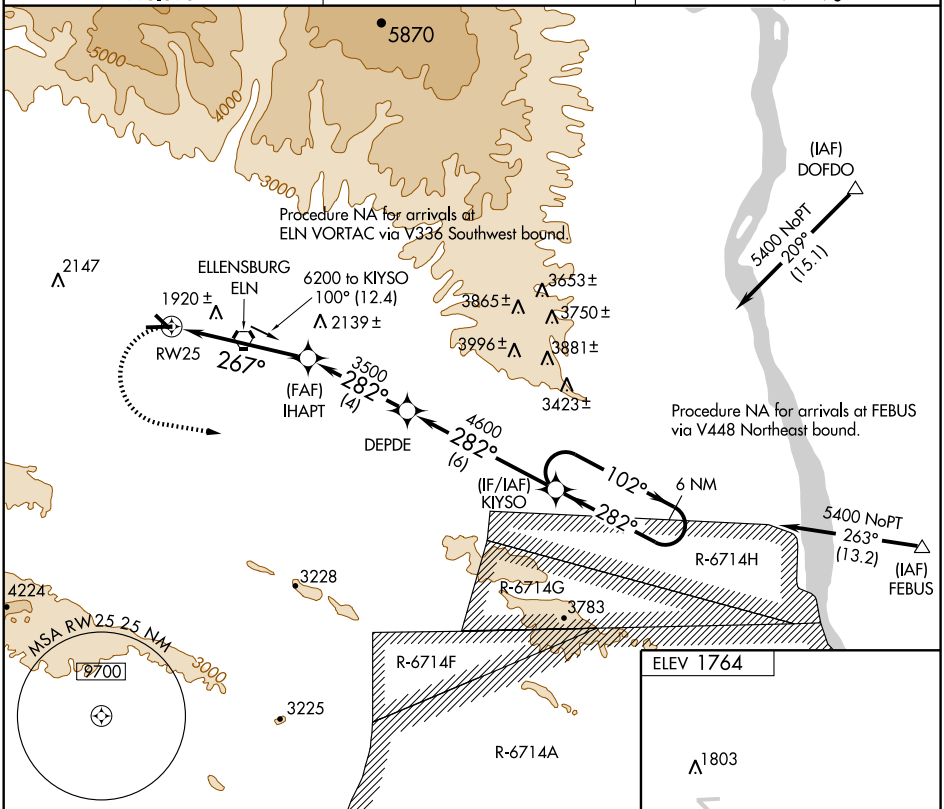
**⚠** Straight-in minimums not authorized at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Procedure not authorized when R-6714A, F, G, H are in operation. When local altimeter setting not received, use Wenatchee altimeter setting and increase all MDA 140 feet and increase visibility LNAV Cat. B ¼ mile, Cats. C/D ½ mile, and increase circling visibility Cat. B ¼ mile, Cats. C/D ½ mile.

**MISSED APPROACH:**  
Climbing left turn to 5400  
direct KIYSO and hold.

ASOS  
**118.375**

SEATTLE CENTER  
**132.6 269.35**

UNICOM  
**123.0 (CTAF) 0**



CATEGORY	A	B	C	D
LNAV MDA	2360-1	605 (600-1)	2360-1¾ 605 (600-1¾)	2360-2 605 (600-2)
CIRCLING	2360-1	596 (600-1)	2360-1¾ 596 (600-1¾)	2500-2¼ 736 (800-2¼)

REIL Rwy 29  
MIRL Rwy 11-29 0

APP CRS  
**297°**

Rwy Ldg **4301**  
TDZE **1759**  
Apt Elev **1764**

**RNAV (GPS) RWY 29**  
ELLENSBURG/ BOWERS FIELD (ELN)

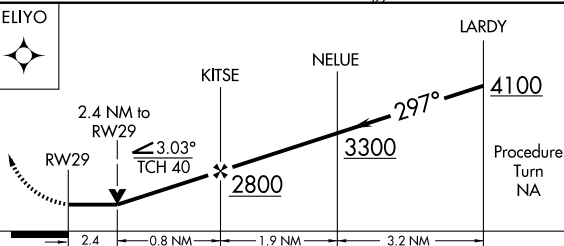
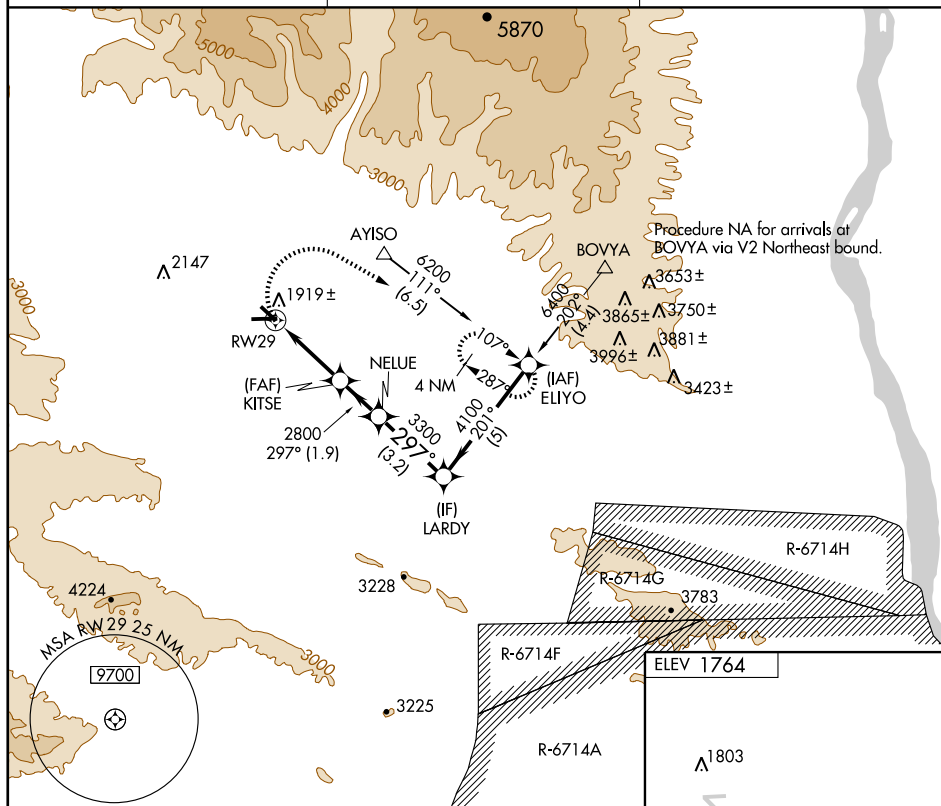
**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Wenatchee altimeter setting and increase all MDA 140 feet and increase visibility LNAV Cat. A and circling Cat. A ¼ mile. VDP NA when using Wenatchee altimeter setting.

**MISSED APPROACH:** Climbing right turn to 5400 direct ELIYO and hold, continue climb-in hold to 5400.

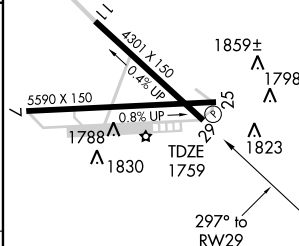
ASOS  
**118.375**

SEATTLE CENTER  
**132.6 269.35**

UNICOM  
**123.0 (CTAF) ①**



CATEGORY	A	B	C	D
LNAV MDA	2560-1 801 (800-1)	2560-1¼ 801 (800-1¼)	NA	
CIRCLING	2560-1 796 (800-1)	2560-1¼ 796 (800-1¼)	NA	



REIL Rwy 29  
MIRL Rwy 11-29 ①

VORTAC ELN <b>117.9</b> Chan <b>126</b>	APP CRS <b>260°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>1764</b>
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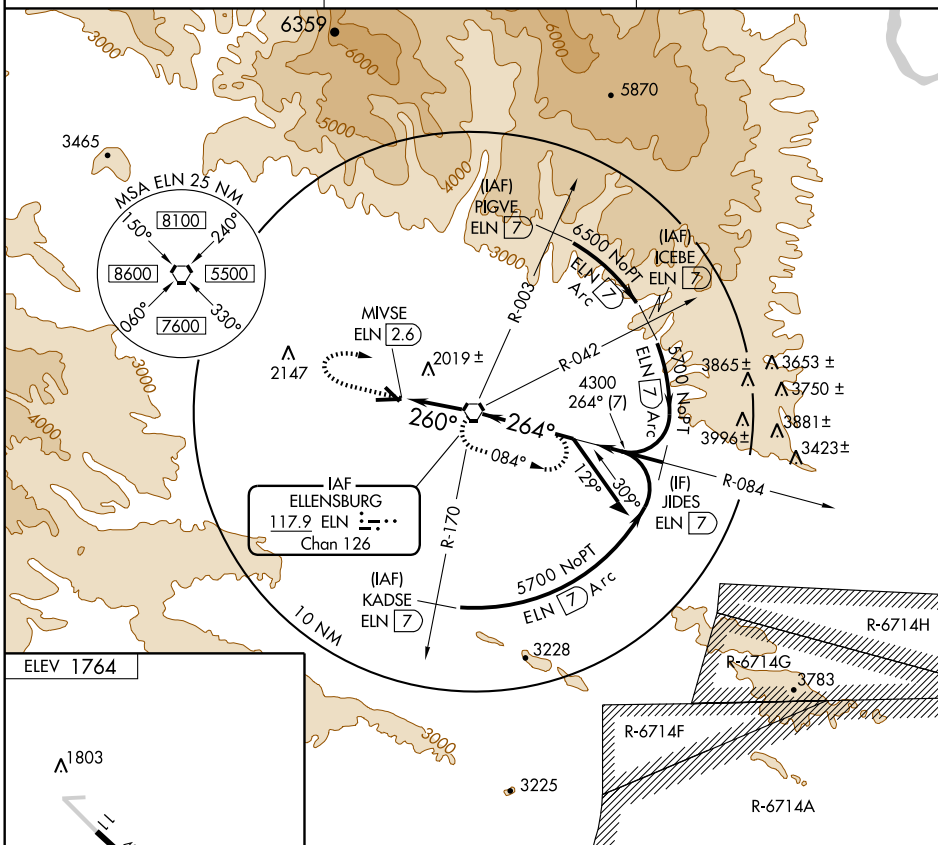
ELLENSBURG/BOWERS FIELD (ELN)

**T** When local altimeter setting not received, use  
**A** Wentachee altimeter setting.

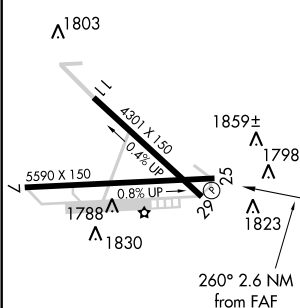
**MISSED APPROACH:** Climb to 4400 then climbing right turn to 5700 direct ELN VORTAC and hold, continue climb-in-hold to 5700. When authorized by ATC, climb-in-hold to MEA for direction of flight.

ASOS  
118.375

SEATTLE CENTER  
132.6 269.35

UNICOM  
123.0 (CTAF) **L**

ELEV 1764



REIL Rwy 29  
MIRL Rwy 11-29 **L**

FAF to MAP 2.6 NM

Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

CATEGORY	A	B	C	D
CIRCLING	3260-1¼ 1496 (1500-1¼)	NA		

ELLENSBURG, WASHINGTON

Amdt 3A 10070

ELLENSBURG/BOWERS FIELD (ELN)

47°02'N-120°32'W

VOR-B

NW-1. 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

VORTAC ELN  
117.9  
Chan 126

APP CRS  
260°

Rwy Idg  
TDZE  
Apt Elev

N/A  
N/A  
1763

VOR/DME-A  
ELLENSBURG/BOWERS FIELD (ELN)

▼  
▲ NA

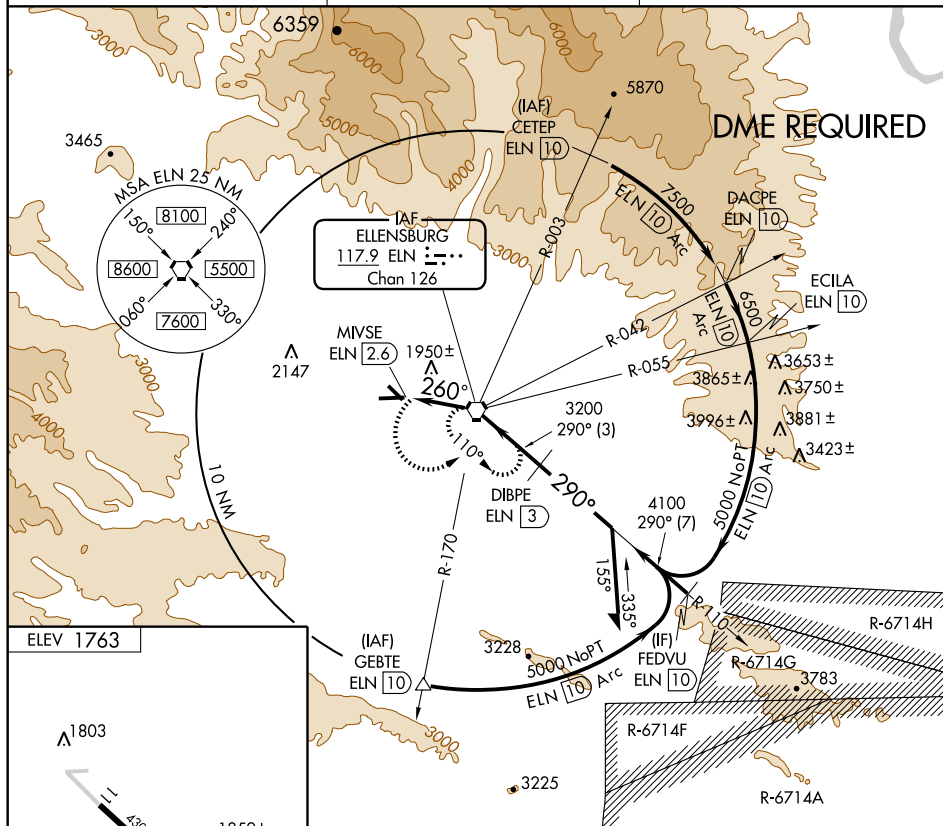
If local altimeter setting not received, use Wenatchee altimeter setting and increase all MDAs 140 feet. Procedure not authorized when R-6714A, F, G, H are in operation.

MISSED APPROACH: Climbing left turn to 5000 direct ELN VORTAC and hold.

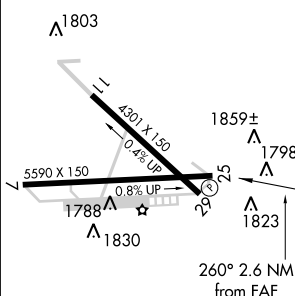
ASOS  
118.375

SEATTLE CENTER  
132.6 269.35

UNICOM  
123.0 (CTAF) ①



ELEV 1763

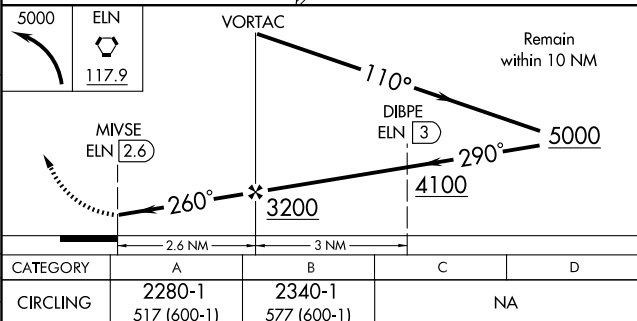


REIL Rwy 29  
MIRL Rwy 11-29 ①

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

ELLENSBURG, WASHINGTON

Amdt 3 10070



CATEGORY	A	B	C	D
CIRCLING	2280-1 517 (600-1)	2340-1 577 (600-1)	NA	

ELLENSBURG/BOWERS FIELD (ELN)

VOR/DME-A

47°02'N-120°32'W

NW-1, 21 OCT 2010 to 18 NOV 2010

**EPHRATA MUNI** (EPH) 2 SE UTC-8(-7DT) N47°18.48' W119°31.01'

1276 B S2 **FUEL** 100LL, JET A TPA—See Remarks NOTAM FILE EPH

**RWY 03-21:** H5500X75 (ASPH) S-60, D-90, 2S-114, 2D-115 MIRL

**RWY 03:** PAPI (P4L)—GA 3.0° TCH 40'. Ground. Rgt tfc. 0.3% up.

**RWY 21:** PAPI (P2L)—GA 3.0° TCH 40'.

**RWY 11-29:** H3843X60 (ASPH) S-40, D-53, 2D-105 MIRL

**RWY 11:** REIL. Ground.

**RWY 29:** REIL. PAPI(P2L)—GA 3.0°. TCH 40'.

**RWY 04-22:** H3467X150 (ASPH)

**RWY 22:** Rgt tfc.

**AIRPORT REMARKS:** Attended 1530-0000Z†. Fuel 24 hr credit card svc avbl. Rwy 04-22 for gliders only. Be alert aerobatic acft activity over center of arpt. Ultralight activity invof arpt. TPA for ultralight acft 1526(250). Heavy glider activity from apron area Apr-Oct. ACTIVATE MIRL Rwy 03-21 and MIRL Rwy 11-29 and REIL Rwy 11 and Rwy 29—CTAF. PAPI Rwy 29, Rwy 03 and Rwy 21 opr continuously. UNICOM monitored intermittently.

**WEATHER DATA SOURCES:** ASOS 135.775 (509) 754-3761.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**RCO** 122.2 (SEATTLE RADIO)

**GRANT COUNTY APP/DEP CON** 126.4 (1400-0600Z†)

**SEATTLE CENTER APP/DEP CON** 126.1 (0600-1400Z†)

**AIRSPACE:** CLASS E svc 1400-0600Z† other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE EPH.

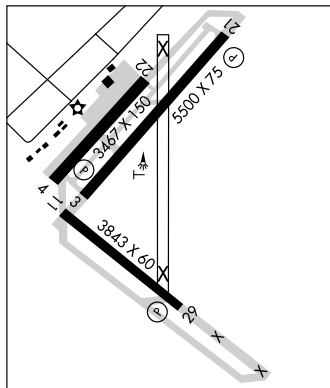
(H) **VORTACW** 112.6 EPH Chan 73 N47°22.68' W119°25.44'

VOR unusable 310°-350° byd 25 NM blo 6,500'.

DME portion unusable:

280°-295° byd 25 NM blo 7,000'.

**SEATTLE**  
H-1C, L-13A  
IAP



201° 5.7 NM to fld. 1250/21E.

310°-350° byd 25 NM blo 6,500'.

WAAS CH <b>50208</b> <b>W03A</b>	APP CRS <b>027°</b>	Rwy Idg <b>5500</b> TDZE <b>1269</b> Apt Elev <b>1276</b>
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# RNAV (GPS) RWY 3

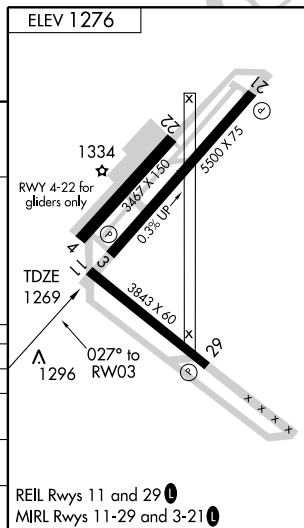
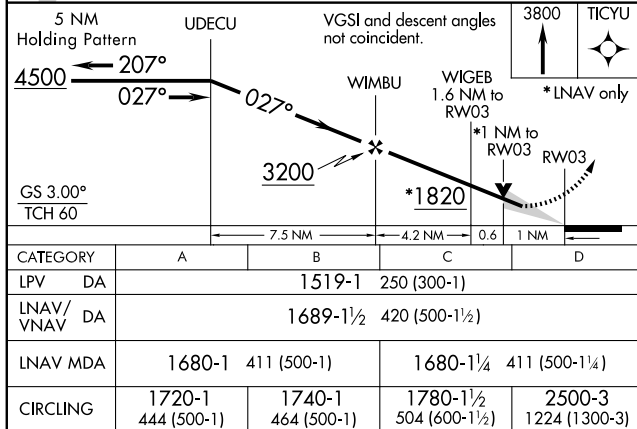
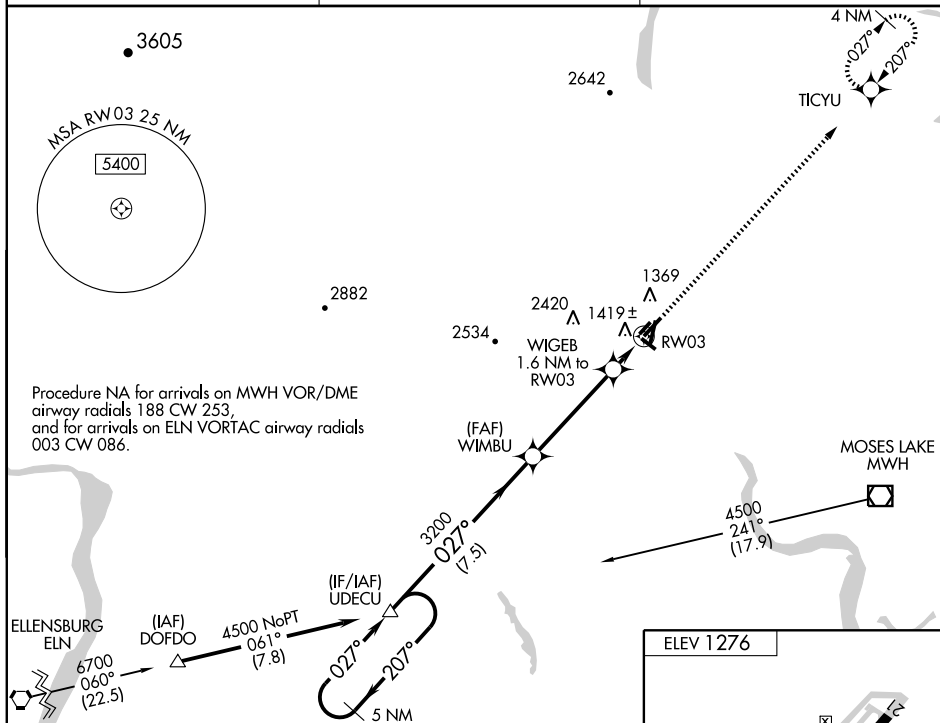

## EPHRATA MUNI (EPH)

**T** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA VDP and Baro-VNAV NA when using Moses Lake/Grant County Intl altimeter setting. When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all DA/MDA 40 feet and LNAV Cat D visibility ¼ mile.

**MISSED APPROACH:** Climb to 3800 direct TICYU and hold.

ASOS  
135.775

GRANT COUNTY APP CON ★  
126.4 379.95

UNICOM  
122.8 (CTAF) 

EPHRATA, WASHINGTON  
Orig 10266

47°18'N - 119°31'W

EPHRATA MUNI (EPH)  
RNAV (GPS) RWY 3

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

WAAS CH <b>82308</b> <b>W21A</b>	APP CRS <b>207°</b>	Rwy Idg <b>5500</b> TDZE <b>1276</b> Apt Elev <b>1276</b>
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RNAV (GPS) RWY 21  
EPHRATA MUNI (EPH)


EPHRATA MUNI (EPH)

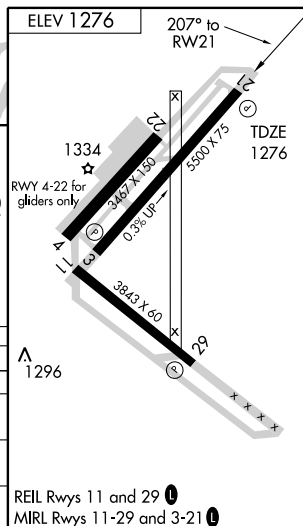
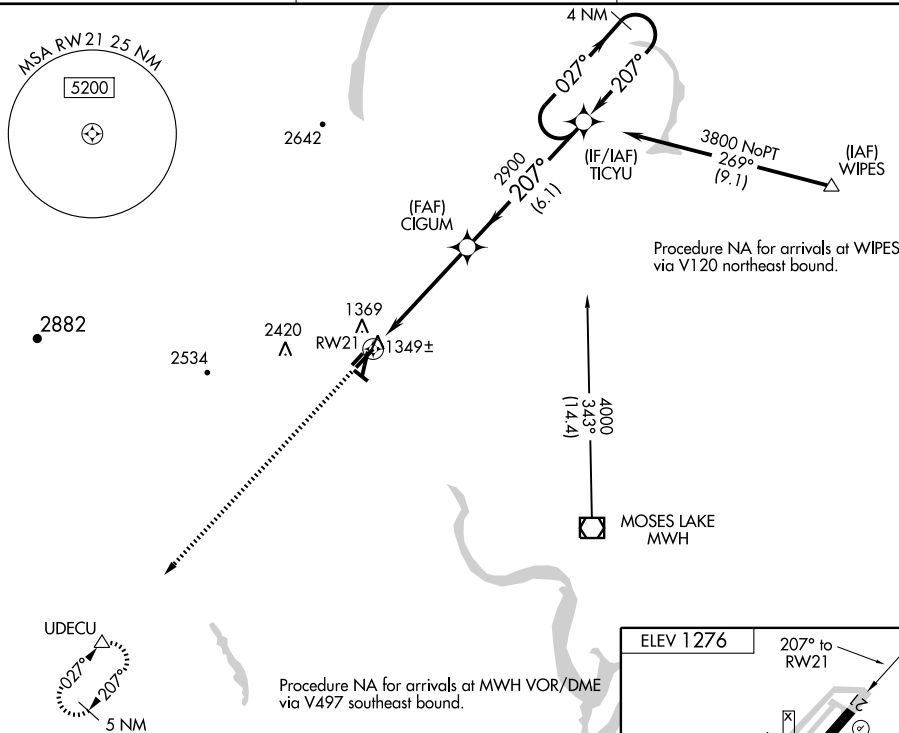
**T** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (29°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Moses Lake/Grant County Intl altimeter setting. When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all DA/DMA/DA 40 feet; Increase visibility LPV all Cats., LNAV Cats. C and D and Circling Cat. C ¼ mile.

**MISSED APPROACH:** Climb to 4500 direct UDECU and hold.

ASOS  
135.775

GRANT COUNTY APP CON ★  
126.4 379.95

UNICOM  
122.8 (CTAF) 



CATEGORY	A	B	C	D
LPV DA		1526- <sup>3</sup> / <sub>4</sub>	250 (300- <sup>3</sup> / <sub>4</sub> )	
LNAV/VNAV DA		2171-4	895 (900-4)	
LNAV MDA	2020-1 744 (800-1)	2020-1 <sup>1</sup> / <sub>4</sub> 744 (800-1 <sup>1</sup> / <sub>4</sub> )	2020-2 <sup>1</sup> / <sub>4</sub> 744 (800-2 <sup>1</sup> / <sub>4</sub> )	2020-2 <sup>1</sup> / <sub>2</sub> 744 (800-2 <sup>1</sup> / <sub>2</sub> )
CIRCLING	2020-1 744 (800-1)	2020-1 <sup>1</sup> / <sub>4</sub> 744 (800-1 <sup>1</sup> / <sub>4</sub> )	2020-2 <sup>1</sup> / <sub>4</sub> 744 (800-2 <sup>1</sup> / <sub>4</sub> )	2500-3 1224 (1300-3)

EPHRATA, WASHINGTON

Orig-A 14JAN10

47°18'N - 119°31'W

EPHRATA MUNI (EPH)

RNAV (GPS) RWY 21

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

VORTAC EPH  
**112.6**  
 Chan **73**

APP CRS  
**022°**

Rwy Idg  
 TDZE **1269**  
 Apt Elev **1276**

**VOR/DME RWY 3**  
 EPHRATA MUNI (EPH)

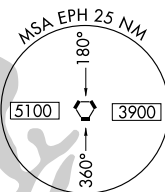
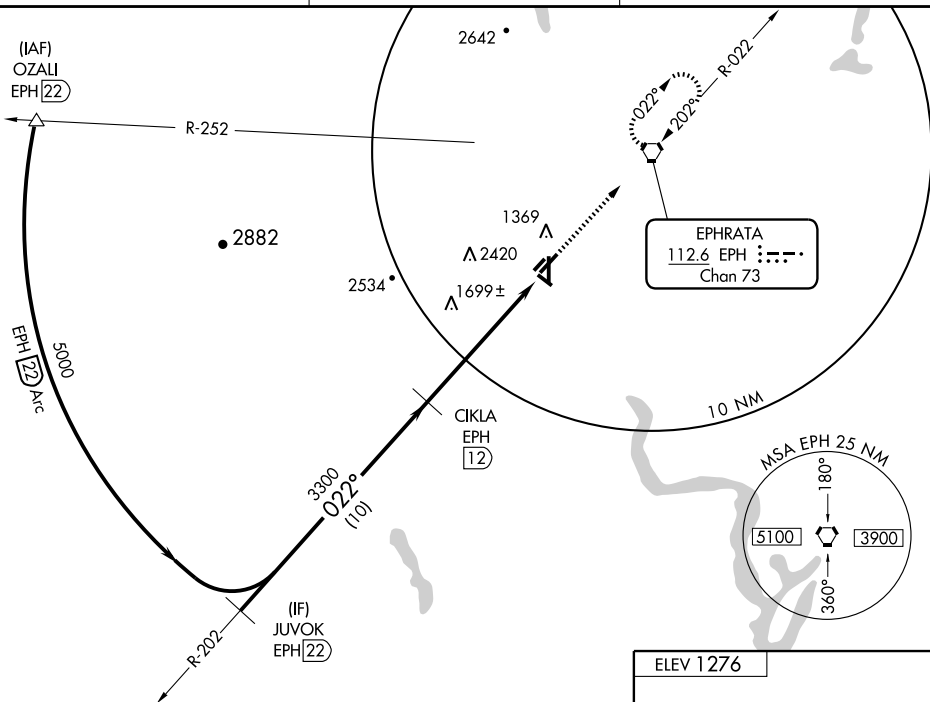
- ▼ When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all MDA 40 feet.
- ▲ VDP NA when using Moses Lake/Grant County Intl altimeter setting.

MISSED APPROACH: Climb to 4000 direct EPH  
 VORTAC and hold, continue climb-in-hold to 4000.

ASOS  
**135.775**

GRANT COUNTY APP CON ★  
**126.4 379.95**

UNICOM  
**122.8 (CTAF) 0**



Procedure  
 Turn NA

JUVOK  
 EPH **22**  
**5000**

CIKLA  
 EPH **12**

4000

EPH

VGSI and descent  
 angles not coincident.

3.05°

TCH 60

EPH **7.6**

EPH **5.9**

10 NM

4.4 NM

1.7 NM

CATEGORY

A

B

C

D

S-3

1960-1

691 (700-1)

1960-2

691 (700-2)

1960-2 ¼

691 (700-2 ¼)

CIRCLING

1960-1

684 (700-1)

1960-2

684 (700-2)

2500-3

1224 (1300-3)

ELEV 1276

RWY 4-22 for  
 gliders only

TDZE  
 1269

1334

3443 X 150

0.3% UP

3843 X 60

1296

022°

6.1 NM

from FAF

REIL Rwy 11 and 29 0

MIRL Rwy 11-29 and 3-21 0



VORTAC EPH <b>112.6</b> Chan <b>73</b>	APP CRS <b>202°</b>	Rwy Idg <b>5500</b> TDZE <b>1276</b> Apt Elev <b>1276</b>
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VOR RWY 21  
EPHRATA MUNI (EPH)

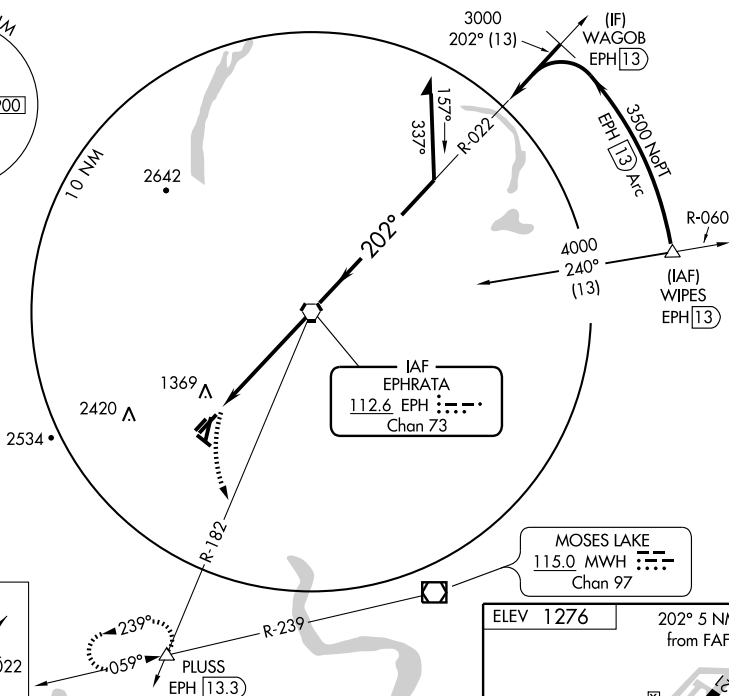
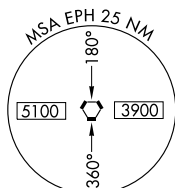
**T** When local altimeter setting not received, use Moses Lake/Grant County  
**A** Intl altimeter setting and increase all MDA 40 feet, increase S-21 Cat D  
visibility 1/4 mile. VDP NA when using Moses Lake/Grant County Intl  
altimeter setting. Final approach from EPH VORTAC holding pattern not  
authorized. Procedure turn required.

**MISSED APPROACH:** Climbing left turn to 4000 via EPH R-182 to PLUSS INT/EPH 13.3 DME and hold. Continue climb-in-hold to 4000.

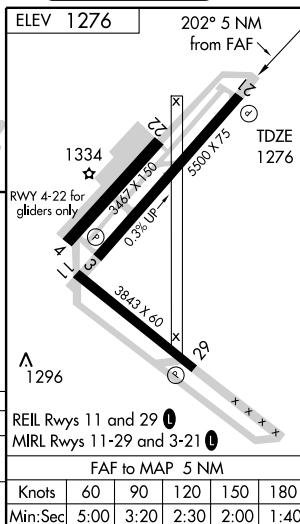
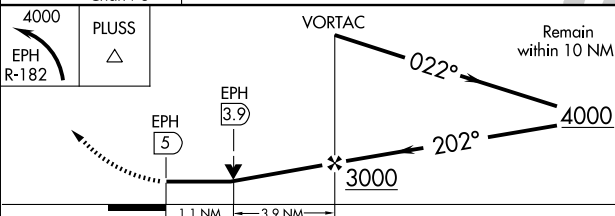
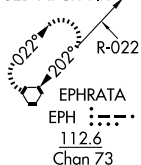
ASOS  
135.775

GRANT COUNTY APP CON★  
126.4 379.95

UNICOM  
122.8 (CTAF) **L**



ALTERNATE  
MISSED APC



EPHRATA, WASHINGTON

Amdt 19 10266

47°18'N - 119°31'W

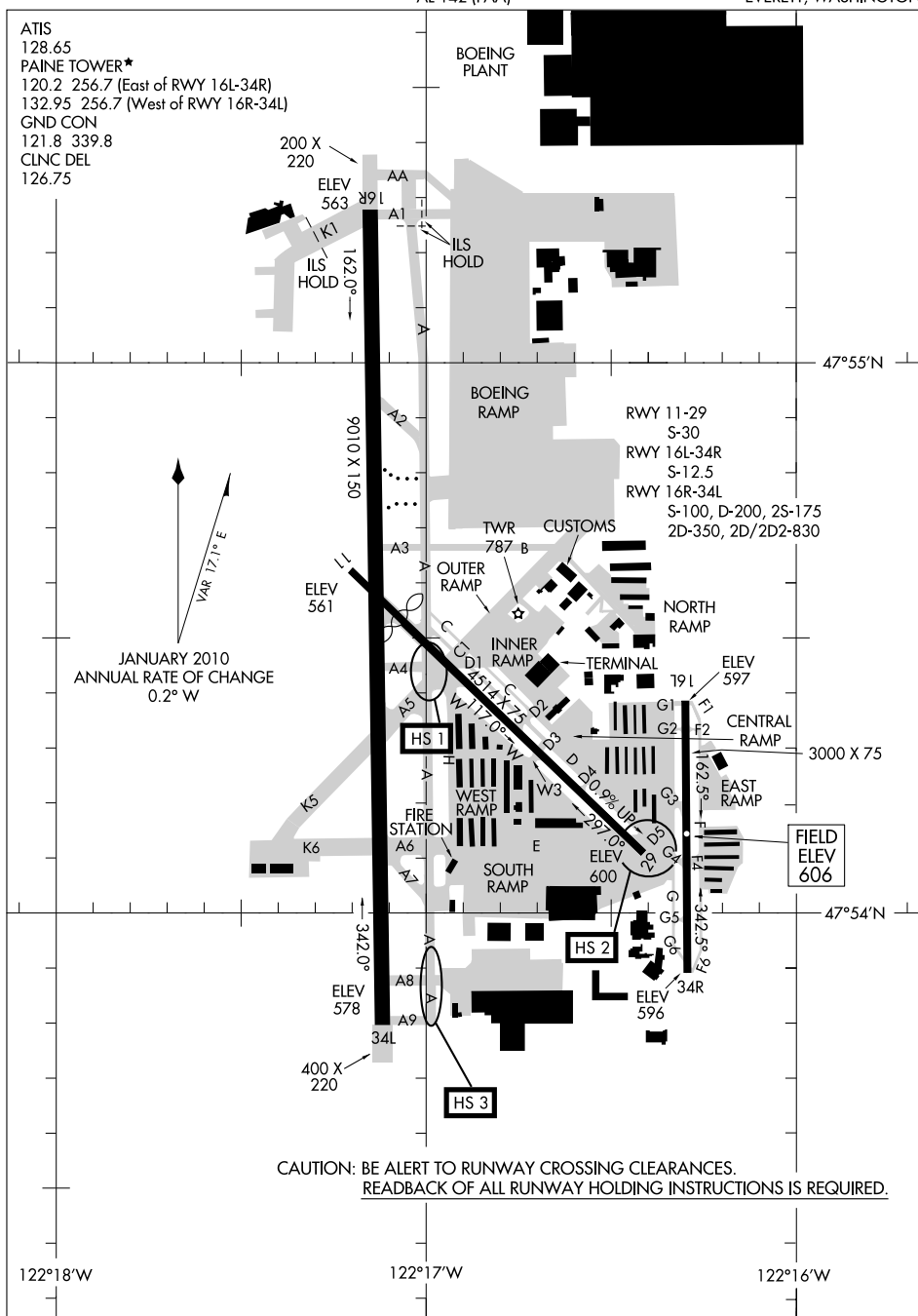
FPHRATA MUNI (FPH)

VOR RWY 21

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010



NW-1. 21 OCT 2010 to 18 NOV 2010

## EVERETT

**SNOHOMISH CO (PAINE FLD)** (PAE) 6 SW UTC-8(-7DT) N47°54.42' W122°16.89'

606 B S4 FUEL 100LL, JET A OX 1, 3 TPA—See Remarks LRA

SEATTLE

H-1B, L-1D

ARFF Index—See Remarks NOTAM FILE PAE

**Rwy 16R-34L:** H9010X150 (ASPH-CONC-GRVD) S-100, D-200, 2S-175, 2D-350, 2D/2D2-830 HIRL CL

**Rwy 16R:** MALSR. PAPI(P4R)—GA 2.8°. Rgt tfc.

**Rwy 34L:** MALSF. PAPI(P4L) GA 3.0° TCH 75'. Trees.

**Rwy 11-29:** H4514X75 (ASPH) S-30 MIRL 0.9% up SE

**Rwy 11:** VASI(V2L)—GA 3.25° TCH 60'. Thld dsplcd 799'. Trees.

**Rwy 29:** VASI(V2R)—GA 4.0° TCH 57'. Trees.

**Rwy 16L-34R:** H3000X75 (ASPH) S-12.5 MIRL

**Rwy 16L:** REIL. PAPI(P2L)—GA 3.0°. Pole.

**Rwy 34R:** REIL. PAPI(P2R)—GA 3.0°. Pole. Rgt tfc.

**AIRPORT REMARKS:** Attended 1500-0500Z†. For jet and helicopter fuel

after hrs call 425-355-6600. Helicopters prohibited at fueling islands. Flocks of large and small birds in vicinity of arpt. Class I,

ARFF Index B. Arpt CLOSED to air carrier ops with more than 30 passenger seats 0500-1500Z† except PPR ctc arpt ops

425-388-5110/5480. For additional ARFF capability ctc arpt ops 425-388-5110. Rwy 11-29 and Rwy 16L-34R CLOSED between

0500-1500Z†. First 1000' of Rwy 16R is concrete. Large acft fly W pattern over water, small acft fly E pattern over arpt. Be alert

for converging tfc on base to final legs Rws 16R-34L 0500-1500Z†. Training flights discouraged after 0600Z†.

Rwy 16R-34L touch-and-go lds prohibited Mon-Fri 1500-1700Z†. Rwy 16L-34R and Rwy 11-29 limited to helicopters 8,000 lbs or less. Twy A-2 restricted to 30,000 lbs. Avoid overflight of Boeing ramp NE corner of

arpt due to JET blast. Rwy 34L departures discouraged in calm wind conditions. Avoid intersection departures from Rwy 16L-34R and Rwy 29. Avoid intersection departures from Rwy 11 except from Twy Delta 1 intersection.

Twy Echo lgtS indef. Areas not visible from twr include E edge of S 1200' of Twy A, Twy E from SE corner of west hangars to Twy A, mid section of outer terminal ramp, Twy H from NW edge of west hangars to Twy E, NE

edge of inner terminal ramp. Noise sensitive arpt, for noise abatement procedures and tfc procedures call arpt ops 425-388-5125. It is requested that pilots adhere to the following noise abatement procedures unless

otherwise instructed by twr, itinerant arrival and low apch of small acft over 250 horsepower authorized on Rwy 29, Rwy 16L and Rwy 34R. Itinerant departure of small acft over 250 horsepower on Rwy 11 and Rwy 34R. If

access to Boeing ramp required ctc Boeing Flight Dispatch 206-655-3421 for approval during normal duty hours. TPA-1606 (1000) for light acft, 2006 (1400) for heavy acft. When twr clsd ACTIVATE HIRL Rwy 16R-34L,

MALSR Rwy 16R and PAPI Rwy 34L—CTAF. Landing fee for acft over 30,000 lbs GWT.

**WEATHER DATA SOURCES:** ASOS (425) 355-6192. LAWRs.

**COMMUNICATIONS:** CTAF 132.95 ATIS 128.65 (425)355-9797. **UNICOM:** 122.95

PAINE RCO 122.55 (SEATTLE RADIO)

® **SEATTLE CENTER APP/DEP CON** 128.5

**PAINE TOWER** 132.95 (acft arrival W of centerline or departure Rwy 16R-34L) 120.2 (acft arrival E of centerline or departure Rwy 16L-34R) (1500-0500Z†) **GND CON** 121.8 **CLNC DEL** 126.75

**AIRSPACE:** CLASS D svc 1500-0500Z† other times CLASS E.

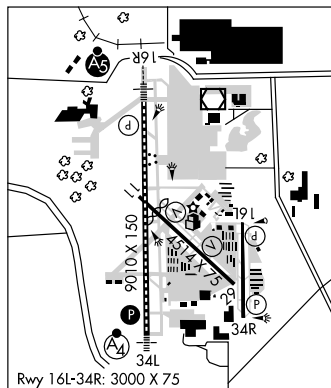
**RADIO AIDS TO NAVIGATION:** NOTAM FILE PAE.

**PAINE (L) VORW/DME** 110.6 PAE Chan 43 N47°55.19' W122°16.67' at fld. 670/20E.

**RIITS NDB (LOM)** 396 PA N48°03.17' W122°17.33' 158° 8.8 NM to fld.

**ILS 109.3** I-PAE Rwy 16R Class IE. LOM RIITS NDB. LOC/GS unmonitored (0500-1500Z†)

**COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.



## HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
BILLINGS, MT		
BILLINGS LOGAN INTL (BIL)	HS 1	Rwy 28R hold line at an unusual location at east edge of run up area.
	HS 2	Twy H crosses Rwy 07 protected area.
BOISE, ID		
BOISE AIR TERMINAL/GOWEN FLD (BOI)	HS 1	Multiple hold lines visible, left turn at Twy A for departure on Rwy 10L.
CHEYENNE, WY		
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)	HS 1	Confusing twy configuration.
EUGENE, OR		
MAHLON SWEET FIELD (EUG)	HS 1	No access to Rwy 34L past Twy A9.
EVERETT, WA		
SNOHOMISH COUNTY (PAINE FIELD) (PAE)	HS 1	Hold line for Rwy 11-29 on Twy A4 and Twy A5 int are more than 500' wide.
	HS 2	Rwy 29 thr in close proximity to ramp areas.
	HS 3	Twy A between Twy A8 and Twy A9 not visible from ATCT.
GREAT FALLS, MT		
GREAT FALLS INTL (GTF)	HS 1	No Rwy 21 access beyond A1.
	HS 2	A3 aligned with Rwy 25, wrong rwy departure risk.
IDAHO FALLS, ID		
IDAHO FALLS RGNL (IDA)	HS 1	Rwy 17-35 Twy C hold bars.
	HS 2	Twy A1 and Rwy 20 apch hold bar.
	HS 3	Rwy 17 and Twy A hold bar.
LEWISTON, ID		
LEWISTON-NEZ PERCE COUNTY (LWS)	HS 1	Twy C and Twy G int close proximity to Rwy 12-30.
	HS 2	Twy G between Rwy 08-26 and Rwy 30 thr. Short distance between rwys.
PORTLAND, OR		
PORTLAND INTL (PDX)	HS 1	Limited wing-tip clearance at twy convergence point.
SALEM, OR		
MCNARY FLD (SLE)	HS 1	When the ATCT is closed aircraft should not hold at this position if traffic is arriving or departing Rwy 13-31.

(SEE CONTINUATION PAGE FOR MORE LISTINGS)

## HOT SPOTS

(CONTINUED)

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
SEATTLE, WA		
BOEING FIELD/ KING COUNTY INTL (BFI)	HS 1	Twy Z restricted access area.
	HS 2	Rwy 13R-31L and Twy A9. Wrong rwy departure risk.
SEATTLE, WA		
SEATTLE-TACOMA INTL (SEA)	HS 1	Aircraft exiting Rwy 34R via Twy H then Twy J; limited distance between rws.

\*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

LOC I-PAE <b><u>109.3</u></b>	APP CRS <b>159°</b>	Rwy Idg TDZE Apt Elev	<b>9010</b> <b>570</b> <b>606</b>
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## ILS or LOC/DME RWY 16R

EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (PAE)

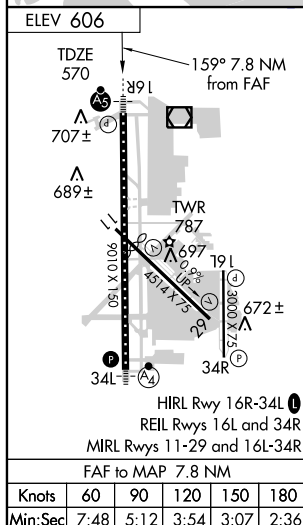
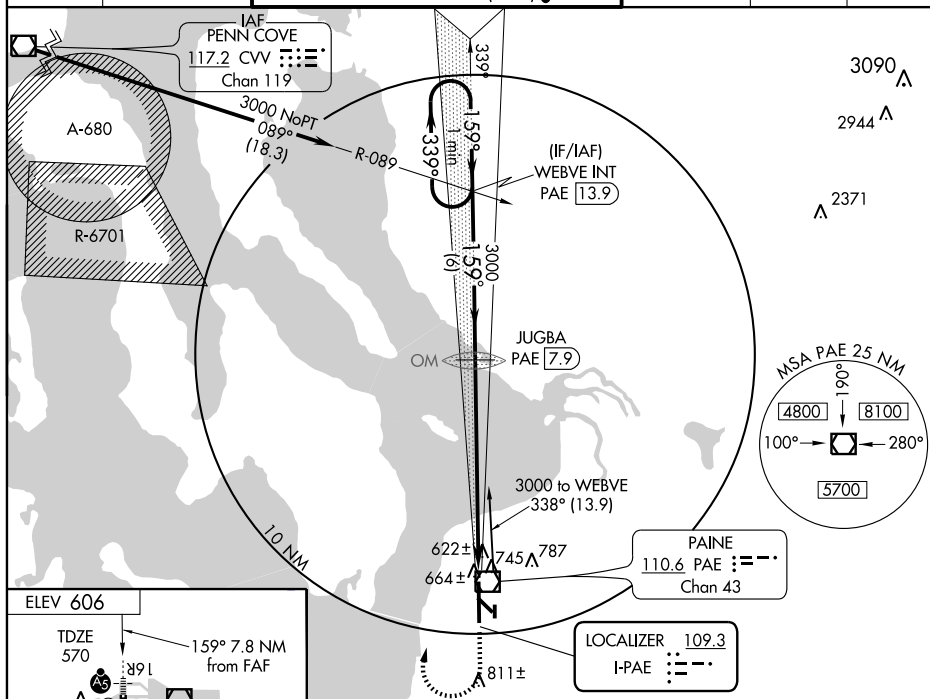
- ⚠** DME from PAE VOR/DME. Simultaneous reception of I-PAE and PAE DME required. When local altimeter setting not received, use Seattle-Tacoma IAL altimeter setting: increase DDA to 858 feet; increase all MDA 100 feet, increase S-LOC 16R Cat C visibility to RVR 5000, Cat D to RVR 6000. For inoperative MALSR when using Seattle-Tacoma IAL altimeter setting, increase S-LSL 16R all Cnts visibilities to RVR 5000.

MALSR



**MISSED APPROACH:** Climb to 1300 then climbing right turn to 3000 via heading 014° and PAE VOR/DME R-338 to WEBVE INT/PAE 13.9 DME and hold.

ATIS <b>128.65</b>	SEATTLE CENTER <b>128.5 306.9</b>	PAINE TOWER★ (E of Rwy 16L-34R) (W of Rwy 16R-34L) <b>120.2 256.7 132.95 (CTAF) 0 256.7</b>		GND CON <b>121.8 339.8</b>	CLNC DEL <b>126.75</b>	UNICOM <b>122.95</b>
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One Minute Holding Pattern

WEVBE INT  
PAE [13.9]

JUGBA  
PAE [7.9]

1300 ↑

3000 ↗  
014°

PAE  
R-338  
110.6

WEVBE INT

3000 ← 339°  
159° →

3000

GS 2.80°  
TCH 57

6 NM

7.8 NM

CATEGORY	A	B	C	D
S-ILS 16R	786/24 216 (200-½)			
S-LOC 16R	1020/24	450 (500-½)	1020/40 450 (500-¾)	1020/50 450 (500-1)
CIRCLING	1100-1	494 (500-1)	1100-1½ 494 (500-1½)	1160-2 554 (600-2)

EVERETT, WASHINGTON

Amdt 21A 10042

EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (PAE)

47°54'N - 122°17'W

## ILS or LOC/DME RWY 16R

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

## PAINE TWO DEPARTURE

EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (P.A.E.)  
SL-142 (FAA) EVERETT, WASHINGTON

ATIS 128.65  
CLNC DEL  
126.75  
GND CON  
121.8 339.8  
PAINE TOWER\*  
120.2 256.7 (E of Rwy 16L-34R)  
132.95 (CTAF) 256.7 (W of Rwy 16R-34L)  
SEATTLE CENTER  
128.5 306.9

## WHATCOM

113.0 HUH

Chan 77

N48°56.72'-W122°34.76'

L-1, H-1

## TAKE-OFF MINIMUMS

Rwys 16R, 34L, 34R: Standard.  
Rwys 11, 16L, 29: 300-1.

## WHIDBEY ISLAND

113.8 NUW

Chan 85

N48°21.30'-W122°39.71'

L-1, H-1

## PAINE

110.6 PAE

Chan 43

N47°55.19'-W122°16.67'

L-1, H-1

## SEATTLE

116.8 SEA

Chan 115

N47°26.12'-W122°18.58'

L-1, H-1

## WENATCHEE

111.0 EAT

Chan 47

N47°23.98'-W120°12.65'

L-13

## McCHORD

109.6 TCM

Chan 33

N47°08.86'-W122°28.50'

L-1, H-1

## ELLENSBURG

117.9 ELN

Chan 126

N47°01.46'-W120°27.51'

L-13, H-1

## HOQUIAM

117.7 HQM

Chan 124

N46°56.82'-W124°08.96'

L-1, H-1

## OLYMPIA

113.4 OLM

Chan 81

N46°58.30'-W122°54.11'

L-1, H-1

## YAKIMA

116.0 YKM

Chan 107

N46°34.22'-W120°26.68'

L-13, H-1

## TAKE-OFF OBSTACLE NOTES

Rwy 11: 72' AGL tree 1160' from DER, 600' left of centerline.

Rwy 16L: 68' and 101' AGL trees 1040' to 1820' from DER, 480' to 560' left of centerline.

Rwy 29: 56', 69', 101', 128' AGL trees 340' to 2140' from DER.

NOTE: Center may assign initial heading to be flown and vector departures in all quadrants within 10 miles of the Paine Airport provided no altitude restrictions are imposed prior to reaching MVA.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

Fly Runway heading or as assigned; expect vectors to join assigned route.

Maintain assigned altitude; expect filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If not in contact with SEATTLE CENTER upon reaching 2000', continue climb to assigned altitude and proceed direct to PAE VOR/DME. Thence via assigned route.

## PAINE TWO DEPARTURE

WAAS CH <b>60911</b> <b>W16A</b>	APP CRS <b>159°</b>	Rwy Idg TDZE <b>570</b> Apt Elev <b>606</b>	<b>9010</b> <b>570</b> <b>606</b>
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## RNAV (GPS) RWY 16R

EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (P.A.E.)



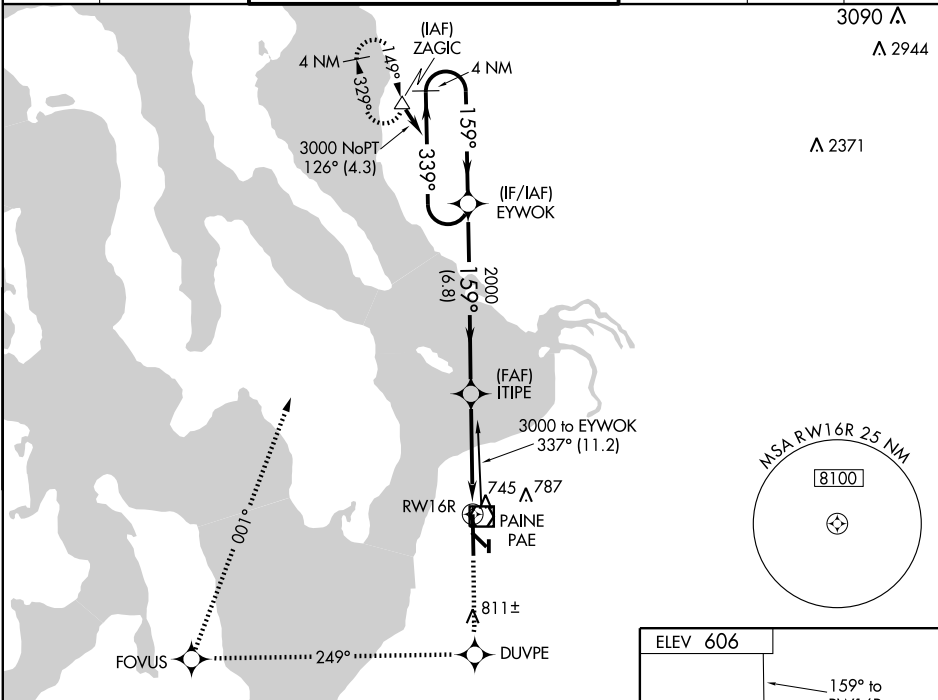
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).  
DME/DME RNP-0.3 NA.  
For inoperative MALSR, increase LPV all Cats visibility to RVR 5000.

MALSR

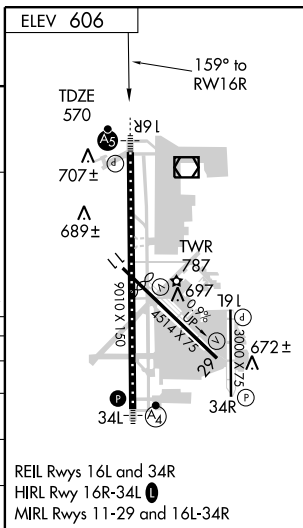


MISSED APPROACH: Climb to 3000 direct DUVPE and via track 249° to FOVUS and via track 001° to ZAGIC and hold.

ATIS	SEATTLE CENTER	PAINE TOWER★ (E of Rwy 16L-34R) (W of Rwy 16R-34L)	GND CON	CLNC DEL	UNICOM
<b>128.65</b>	<b>128.5 306.9</b>	<b>120.2 256.7 132.95 (CTAF) 256.7</b>	<b>121.8 339.8</b>	<b>126.75</b>	<b>122.95</b>



VGSI and RNAV glidepath not coincident.					
4 NM Holding Pattern	EYWOK	3000 ↑	DUVPE ✧	trk 249°	FOVUS ✧
				trk 001°	ZAGIC △
3000 ← 339° 159° → ITIPE GS 3.00° TCH 51 2000 *1.4 NM to RW16R *LNAV only 6.8 NM 2.9 NM 1.4 NM					
CATEGORY	A	B	C	D	
LPV DA	830/24 260 (300-½)				
LNAV/VNAV DA	1045/60 475 (500-1¼)				
LNAV MDA	1060/24	490 (500-½)	1060/40	490 (500-¾)	1060/50
CIRCLING	1100-1	494 (500-1)	1100-1½	494 (500-1½)	1180-2
					574 (600-2)





WAAS CH <b>65611</b> <b>W34A</b>	APP CRS <b>339°</b>	Rwy Idg TDZE Apt Elev	<b>9010</b> <b>579</b> <b>606</b>
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## RNAV (GPS) RWY 34L

EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (P.A.E.)

**▽** DME/DME RNP-0.3 NA.  
Baro-VNAV NA below -16°C (4°F).  
Inoperative table does not apply to LPV and LNAV/VNAV  
all Cats and LNAV Cat C.

MALSF



MISSED APPROACH: Climb to 3000 direct  
EYWOK and hold.

ATIS  
**128.65**

SEATTLE CENTER  
**128.5 306.9**

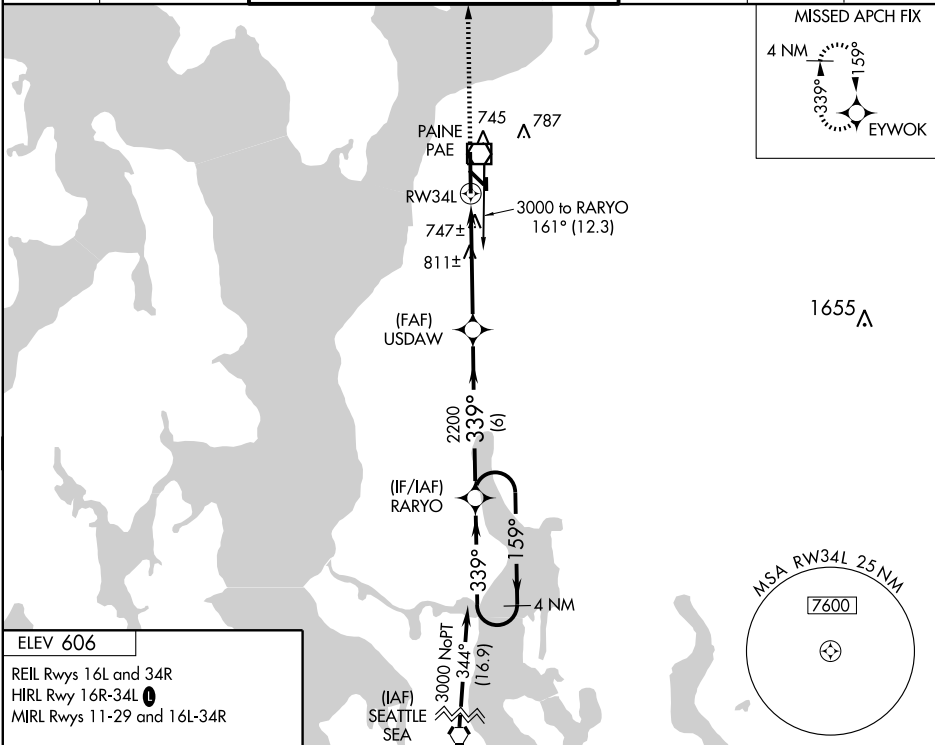
PAINE TOWER★  
(E of Rwy 16L-34R) (W of Rwy 16R-34L)  
**120.2 256.7 132.95 (CTAF) 0 256.7**

GND CON  
**121.8 339.8**

CLNC DEL  
**126.75**

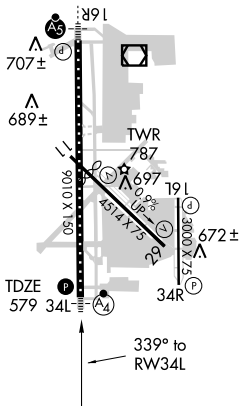
UNICOM  
**122.95**

MISSED APCH FIX



ELEV 606

REIL Rws 16L and 34R  
HIRL Rwy 16R-34L  
MIRL Rws 11-29 and 16L-34R



3000	EYWOK	VGSI and RNAV glidepath not coincident.	RARYO	4 NM Holding Pattern
↑	✧			
*LNAV only	*1.5 NM to RW34L	USDAW	159° → 3000	← 339°
			339°	2200
	1.5	3.4 NM	6 NM	GS 3.00° TCH 51
CATEGORY	A	B	C	D
LPV DA	920-1¼ 341 (400-1¼)			
LNAV/VNAV DA	1040-1½ 461 (500-1½)			
LNAV MDA	1140-¾ 561 (600-¾)		1140-1½ 561 (600-1½)	1140-1¾ 561 (600-1¾)
CIRCLING	1140-1½ 534 (600-1½)			1180-2 574 (600-2)



VOR/DME PAE <b>110.6</b> Chan <b>43</b>	APP CRS <b>140°</b>	Rwy Idg TDZE <b>570</b> Apt Elev <b>606</b>
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**VOR RWY 16R**

EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (PAE)



MISSED APPROACH: Climb to 1700 then climbing right turn to 2000 direct PAE VOR/DME and hold.

ATIS  
**128.65**

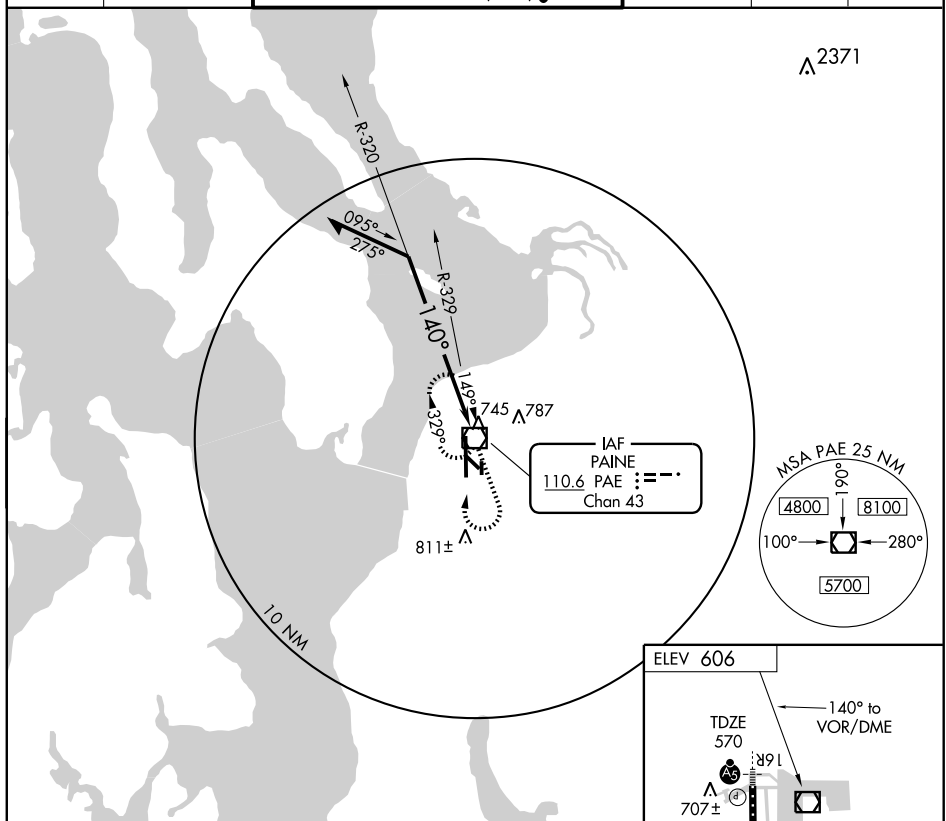
SEATTLE CENTER  
**128.5 306.9**

PAINE TOWER ★  
(E of Rwy 16L-34R) (W of Rwy 16R-34L)  
**120.2 256.7 132.95 (CTAF) 0 256.7**

GND CON  
**121.8 339.8**

CLNC DEL  
**126.75**

UNICOM  
**122.95**



ELEV 606

Remain  
within 10 NM

VOR/DME

1700  
↑

2000  
↘

PAE  
□  
**110.6**

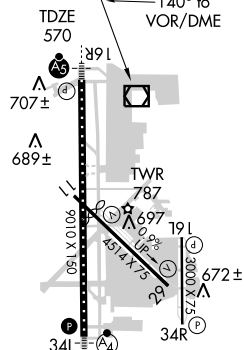
2000

PAE

1.8

1.6 NM

CATEGORY	A	B	C	D
S-16R	1100/24	530 (500-½)	1100/50 530 (500-1)	1100/60 530 (500-1¼)
CIRCLING	1100-1	494 (500-1)	1100-1½ 494 (500-1½)	1180-2 574 (600-2)



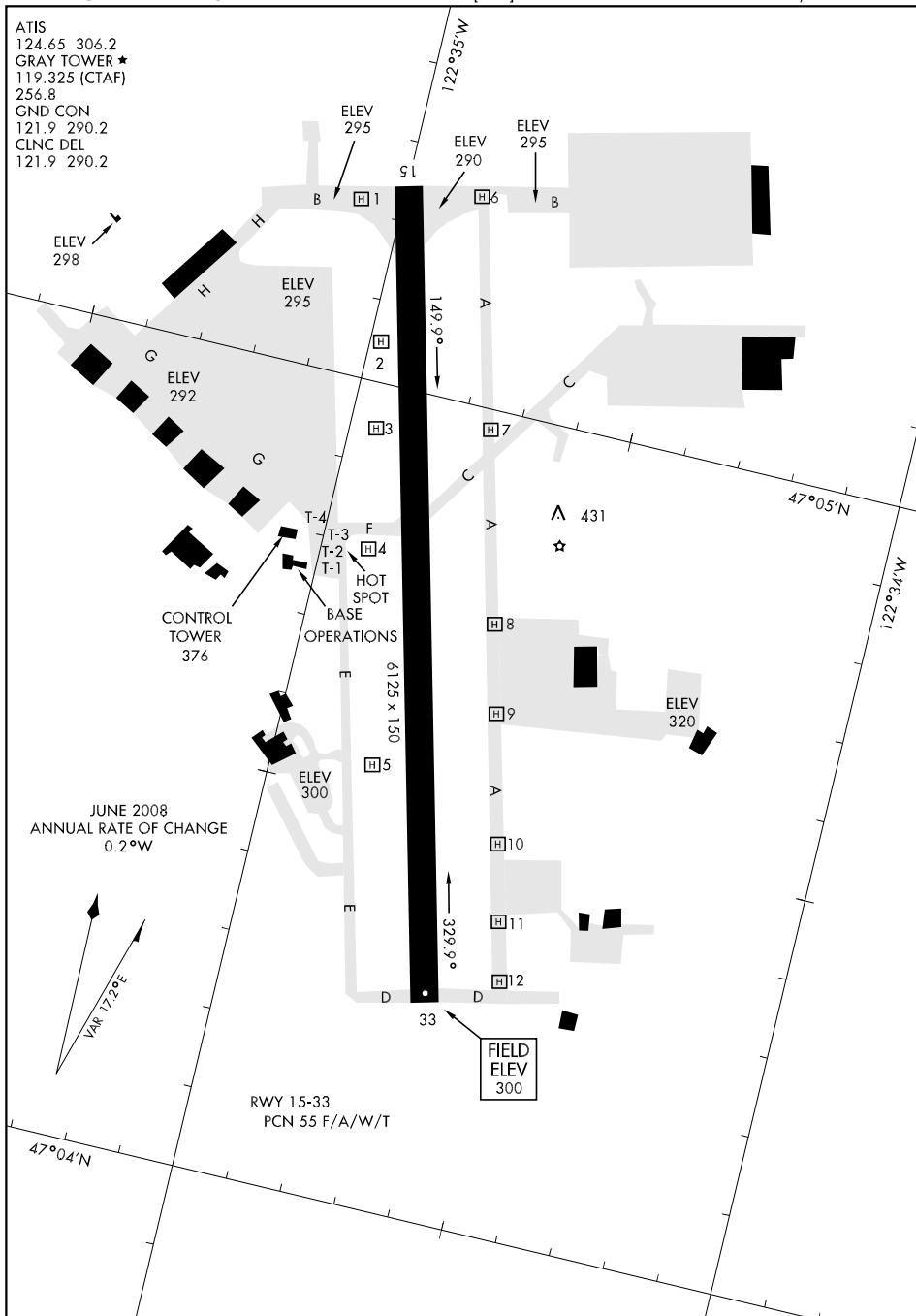
HIRL Rwy 16R-34L  
REIL Rws 16L and 34R  
MIRL Rws 11-29 and 16L-34R

## AIRPORT DIAGRAM

AFD-413 [USA]

FORT LEWIS, WASHINGTON

ATIS  
 124.65 306.2  
 GRAY TOWER ★  
 119.325 (CTAF)  
 256.8  
 GND CON  
 121.9 290.2  
 CLNC DEL  
 121.9 290.2



FORT LEWIS, WASHINGTON

GRAY AAF (KGRF)

# AIRPORT DIAGRAM

**GRAY AAF (JOINT BASE LEWIS-MCCHORD)** (GRF)(KGRF) A (AR ARNG) 1 E UTC-8(-7DT)

SEATTLE

N47°04.75' W122°34.85'

H-1B, L-1D

300 B TPA—See Remarks Class I, ARFF Index Ltd. NOTAM FILE SEA Not insp.

DIAP, AD

**RWY 15-33:** H6125X150 (ASPH) PCN 55 F/A/W/T HIRL

**RWY 15:** SSALR. PAPI.

**RWY 33:** SSALR.

**MILITARY SERVICE:** FUEL J8—Ltd supply.

**MILITARY REMARKS:** See FLIP AP/1 Supplementary Arpt Remarks. **RSTD** 48 hr PPR transient acft, DSN

357-6628/5998, C253-967-6628/5998. **CAUTION** High volume of personnel/vehicles with negative radio communication on ground control crossing Twy G and Twy H. Numerous small arms 0.8 NM E of afld. **TFC PAT** TPA—E/W tfc, multi-engine fixed wing 1500(1200), single engine fixed wing 1300(1000), rotary wing 1000(700). Unmanned aerial vehicles 1000(700), west tfc only. **MISC** Special VFR Day fixed wing 700-1, rotary wing 300-½. Night fixed wing not authorized, rotary wing 500-1. Acft conducting tactical opr on Fort Lewis military reservation ctc OPS prior to opr. Ctc Gray tfc on CTAF when twr closed. No hangar for transient acft. Runway condition reading will be reported Mon-Fri, 1500-2300Z± via NOTAM and ATIS during inclement winter weather. WX observation visibility is limited to 2 SM in some directions. Wx observation automated by AN/FMQ-19, WX observation augmented/backup as required. Twy E unusable to C-17 and larger acft. East ramp parking limited to C-12/UC-35/C-21 and smaller acft. **AR** Ctc OPS DSN 357-3036, C253-967-3036. **ARNG** Opr Tue-Fri 1430-0100Z± except holidays. Transient alert not avbl. Ltd parking. PPR for acft rqr fuel and parking, DSN 323-3805, C253-912-3805.

**COMMUNICATIONS:** CTAF 119.325 ATIS 124.65 306.2 **BULLSEYE RADIO** 34.6 Opr continuously, exc holidays

Ⓡ **SEATTLE APP/DEP** 120.1 290.9

**TOWER** 119.325 256.8 276.4 (continuous, except holidays) **GND CON** 121.9 290.2 **CLNC DEL** 121.9 290.2 **PMSV METRO** 134.1 38.45 Full svc continuous, except holidays. Full svc may vary with local flight schedule. WX briefings for transient air crews avbl from 25 Operational Weather Squadron, Davis-Monthan AFB, DSN 228-6598) **OPS** 41.50 138.6 **AR OPS** 36.10 **ARNG OPS** 32.6

**AIRSPACE:** CLASS D svc continuous, except holidays, other times CLASS E.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA

**LACOMAS NDB (MHW)** 328 LAC N47°00.48' W122°33.39' 329° 4.4 NM to fld. Unmonitored holidays.

**GRAYE NDB (MHW)** 216 GRF N47°08.99' W122°36.27' 147° 4.4 NM to fld. Unmonitored holidays.

**ILS/DME** 108.3 I-GRF Chan 20 Rwy 15. LOM GRAYE NDB Unmonitored holidays.

**PAR** Opr Mon-Fri 1600-0759Z± except federal holidays.

**COMM/NAV/WEATHER REMARKS:** All rotary wing acft ctc Bullseye Radio prior to entry R6703A-D.

**GRAYE** N47°08.99' W122°36.27'. NOTAM FILE SEA.

SEATTLE

**NDB (MHW)** 216 GRF 349° 7.2 NM to Tacoma Narrows. Unmonitored holidays.

L-1D

## GREENWATER

**RANGER CREEK** (21W) 10 SE UTC-8(-7DT) N47°00.77' W121°32.02'

SEATTLE

2650 NOTAM FILE SEA

**RWY 15-33:** H2875X30 (ASPH)

**RWY 15:** Trees.

**RWY 33:** Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Oct 1 to Jun 1. Pedestrians, vehicles and animals on and invov rwy.

USFS campgrounds east and north of rwy.

**COMMUNICATIONS:** CTAF 122.9

**GROVE FLD** (See CAMAS)

**HARVEY FLD** (See SNOHOMISH)

**HOQUIAM** N46°56.82' W124°08.96' NOTAM FILE HQM.

SEATTLE

(H) **VORTACW** 117.7 HQM Chan 124 062° 8.9 NM to Bowerman. 10/19E. **HIWAS.**

H-1B, L-1D

**RCO** 122.2 (SEATTLE RADIO)

NDB GRF <b>216</b>	APCH CRS <b>147°</b>	Rwy Idg TDZE Arpt Elev <b>6125</b> <b>299</b> <b>300</b>
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AL-413 [USA]

GRAY AAF (KGRF)

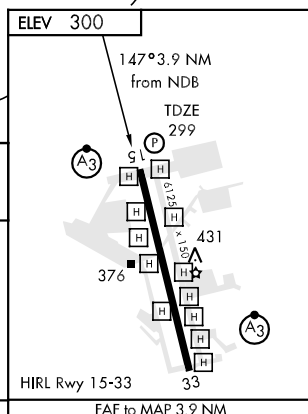
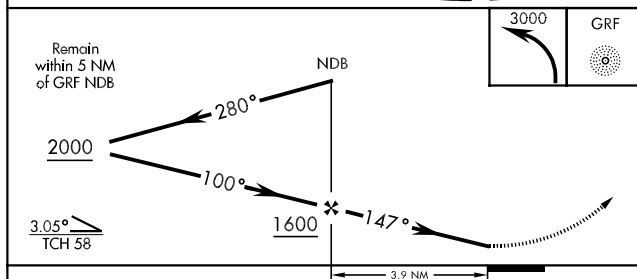
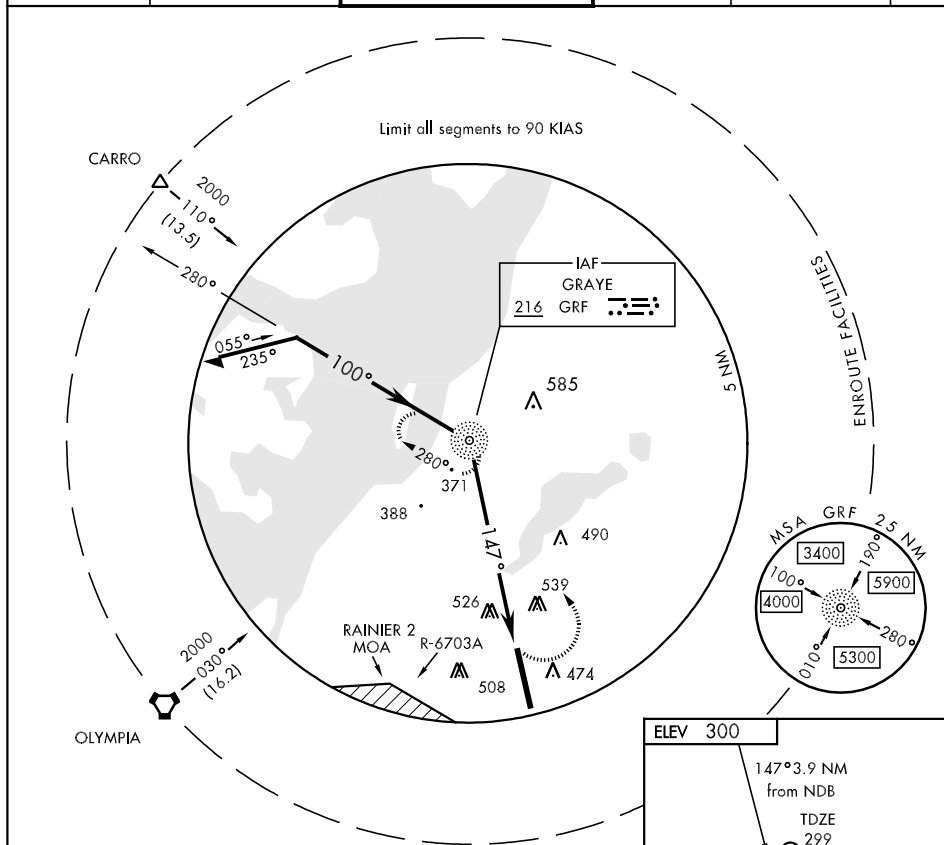


\* When ALS inop increase RVR to 24 and vis to ½ mile.



MISSED APPROACH: Climbing left turn to 3000 direct GRF NDB and hold.

ATIS <b>124.65 306.2</b>	SEATTLE APP CON <b>120.1 290.9</b>	GRAY TOWER ★ <b>119.325 (CTAF) 256.8</b>	GND CON <b>121.9 290.2</b>	CLNC DEL <b>121.9 290.2</b>	PAR
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CATEGORY	COPTER	Knots	45	60	75	90	105
H-15 *	840/12 541 (600-¼)	Min:Sec	5:12	3:54	3:08	2:36	2:14

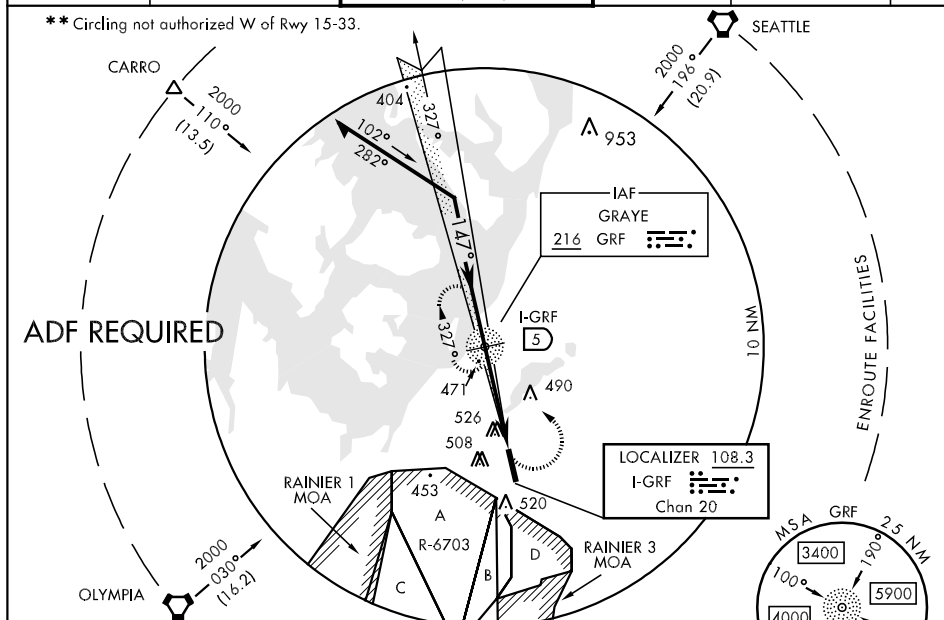
LOC I-GRF <b>108.3</b> Chan <b>20</b>	APCH CRS <b>147°</b>	Rwy Idg <b>6125</b> TDZE <b>299</b> Arpt Elev <b>300</b>
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AL-413 [USA]

GRAY AAF (KGRF)

<p><b>V</b></p> <p><b>A</b> * When ALS inop, increase CAT CD RVR to 50 and vis to 1 mile.</p>	<p>SSALR</p> <p><b>A3</b></p>	<p>MISSED APPROACH: Climb to 1000, then climbing left turn to 3000 direct GRF NDB and hold, continue climb-in-hold to 3000.</p>
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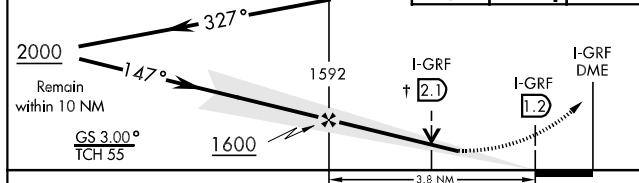
ATIS <b>124.65 306.2</b>	SEATTLE APP CON <b>120.1 290.9</b>	GRAY TOWER ★ <b>119.325 (CTAF) 256.8</b>	GND CON <b>121.9 290.2</b>	CLNC DEL <b>121.9 290.2</b>	PAR
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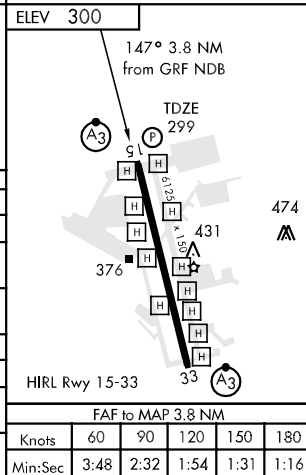
† VDP NA when using McChord AFB altimeter setting.

NDB I-GRF **5**

GRF



CATEGORY	A	B	C	D
S-ILS 15	499/24	200	(200-½)	
S-LOC 15 *	660/24 361 (400-½)	660/40 361 (400-¾)		
CIRCLING **	780-1 480 (500-1)	780-1½ 480 (500-1½)	860-2 560 (600-2)	
McCHORD AFB ALTIMETER SETTING MINIMUMS				
S-ILS 15	515/24	216	(300-½)	
S-LOC 15 *	680/24 381 (400-½)	680/40 381 (400-¾)		
CIRCLING **	800-1 500 (500-1)	800-1½ 500 (500-1½)	880-2 580 (600-2)	



ATIS 124.65 306.2  
CLNC DEL  
121.9 290.2  
GND CON  
121.9 290.2  
GRAY TOWER ★  
119.325 (CTAF) 256.8  
SEATTLE DEP CON  
120.1 290.9

Rwy	Knots	60	120	180	240
15 (a)	V/V(fpm)	430	860	1290	1720
33 (b)	V/V(fpm)	380	760	1140	1520

ATC Climb Rate

(a) To 500'

(b) To 600'

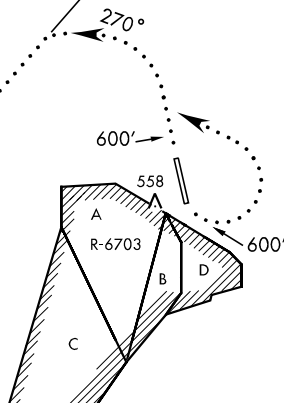


SEATTLE  
116.8 SEA  
Chan 115

OLYMPIA  
113.4 OLM  
Chan 81  
L-1



MC CHORD  
109.6 TCM  
Chan 33



## DEPARTURE ROUTE DESCRIPTION

### TAKE-OFF RUNWAY 15 AND 33:

Climb via runway heading to 600', then turn left (unless otherwise directed by ATC) heading 270 for vectors to assigned route. Maintain altitude as assigned by ATC. Expect filed altitude within five minutes after departure.

**LOST COMMUNICATIONS:** If no transmissions are received within three minutes after departure, continue climb to assigned altitude, intercept and proceed via SEA R-202 to OLM VORTAC, thence via assigned route.



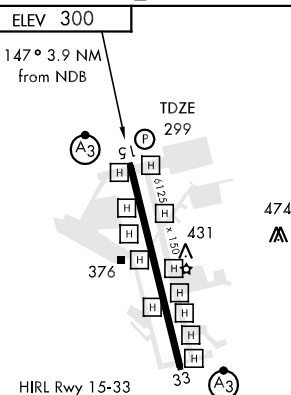
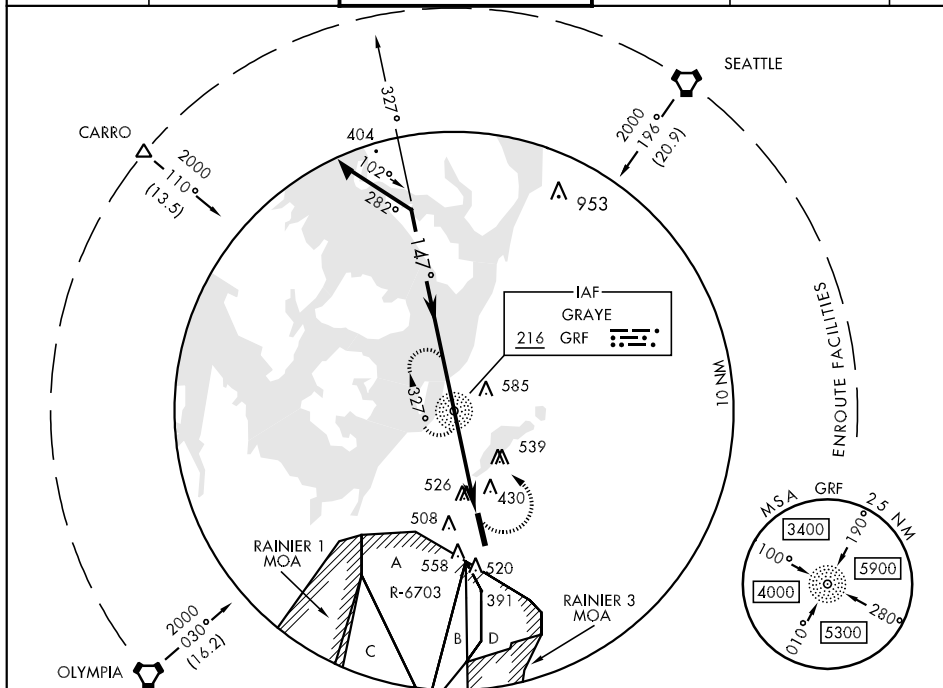
NDB GRF <b>216</b>	APCH CRS <b>147°</b>	Rwy Idg TDZE <b>299</b> Arpt Elev <b>300</b>
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AL-413 [USA]

GRAY AAF (KGRF)

<p>▼ * When ALS inop increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles.</p> <p>▲ ** Circling not authorized W of Rwy 15-33.</p>	SSALR <b>A3</b>	MISSED APPROACH: Climbing left turn to 3000 direct GRF NDB and hold.
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ATIS <b>124.65 306.2</b>	SEATTLE APP CON <b>120.1 290.9</b>	GRAY TOWER ★ <b>119.325 (CTAF) 256.8</b>	GND CON <b>121.9 290.2</b>	CLNC DEL <b>121.9 290.2</b>	PAR
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FAF to MAP 3.9 NM					
Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

FORT LEWIS, WASHINGTON

47°05'N-122°35'W

GRAY AAF (KGRF)

Amdt 20 10098

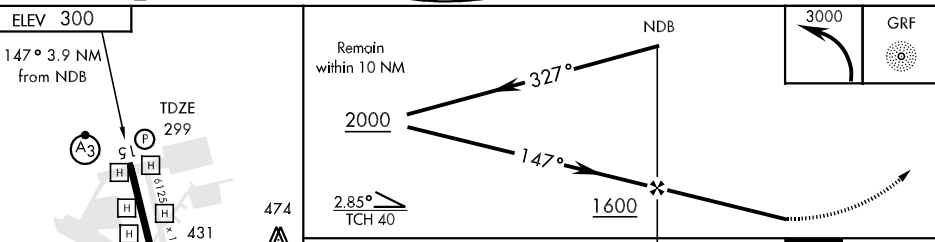


Diagram illustrating the HIRL Rwy 15-33 approach. The diagram shows a runway with a 336m width, a 33m width, and a 3.9 NM distance to the MAP. A 3.9 NM distance is also indicated between the FAF and MAP.

FAF to MAP 3.9 NM					
Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

CATEGORY	A		B		C		D	
S-15 *	840/24	541	(600-½)		840/50 541 (600-1)		840-60 541 (600-1¼)	
CIRCLING **	840-1	540	(600-1)		840-1½ 540 (600-1½)		860-2 560 (600-2)	

McCHORD AFB ALTIMETER SETTING MINIMUMS								
S-15 *	860/24	561	(600-½)		860/50 561 (600-1½)		860-60 561 (600-1¼)	
CIRCLING **	860-1½	560	(600-1½)		860-2 560 (600-2)		880-2½ 580 (600-2½)	

NDB RWY 15


NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

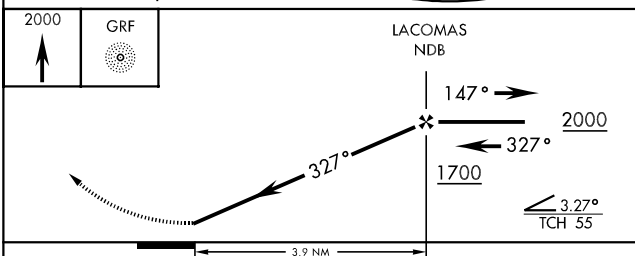
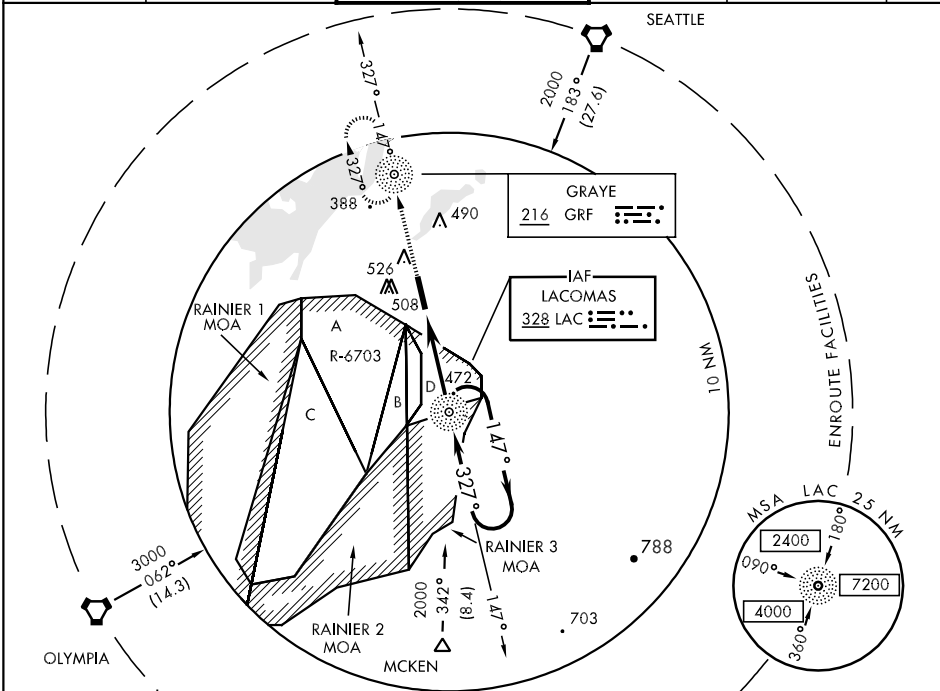
NDB LAC <b>328</b>	APCH CRS <b>327°</b>	Rwy Idg TDZE Arprt Elev <b>6125</b> <b>300</b>
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AL-413 [USA]

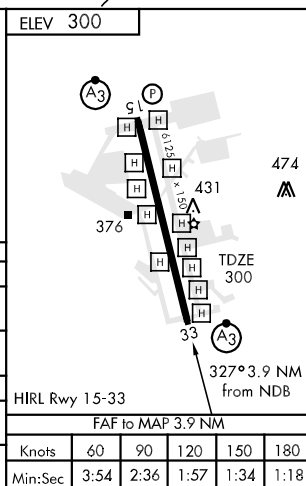
GRAY AAF (KGRF)

<p>▼ * When ALS inop increase CAT AB vis to 1 mile, CAT C vis to 1 ¼ miles, CAT D vis to 1 ½ miles.</p> <p>▲ ** Circling not authorized W of Rwy 15-33.</p>	SSALR 	MISSED APPROACH: Climb to 2000 direct to GRF NDB and hold.
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ATIS <b>124.65 306.2</b>	SEATTLE APP CON <b>120.1 290.9</b>	GRAY TOWER ★ <b>119.325 (CTAF) 256.8</b>	GND CON <b>121.9 290.2</b>	CLNC DEL <b>121.9 290.2</b>	PAR
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CATEGORY	A	B	C	D
S-33 *	780-½ 480 (500-½)		780-¾ 480 (500-¾)	780-1 480 (500-1)
CIRCLING **	780-1 480 (500-1)		780-1½ 480 (500-1½)	860-2 560 (600-2)
McCHORD AFB ALTIMETER SETTING MINIMUMS				
S-33 *	800-½ 500 (600-½)		800-¾ 500 (600-¾)	800-1 500 (600-1)
CIRCLING **	800-1 500 (600-1)		800-1½ 500 (600-1½)	880-2 580 (600-2)



APCH CRS  
**147°**

Rwy ldg  
TDZE **299**

Arpt Elev  
**300**

AL-413 [USA]

GRAY AAF (KGRF)



\* Circling not authorized W of Rwy 15-33.

DME/DME RNP-0.3 NA

SSALR



MISSED APPROACH: Climbing left  
turn to 2000 direct CIKRI and hold.

ATIS  
**124.65 306.2**

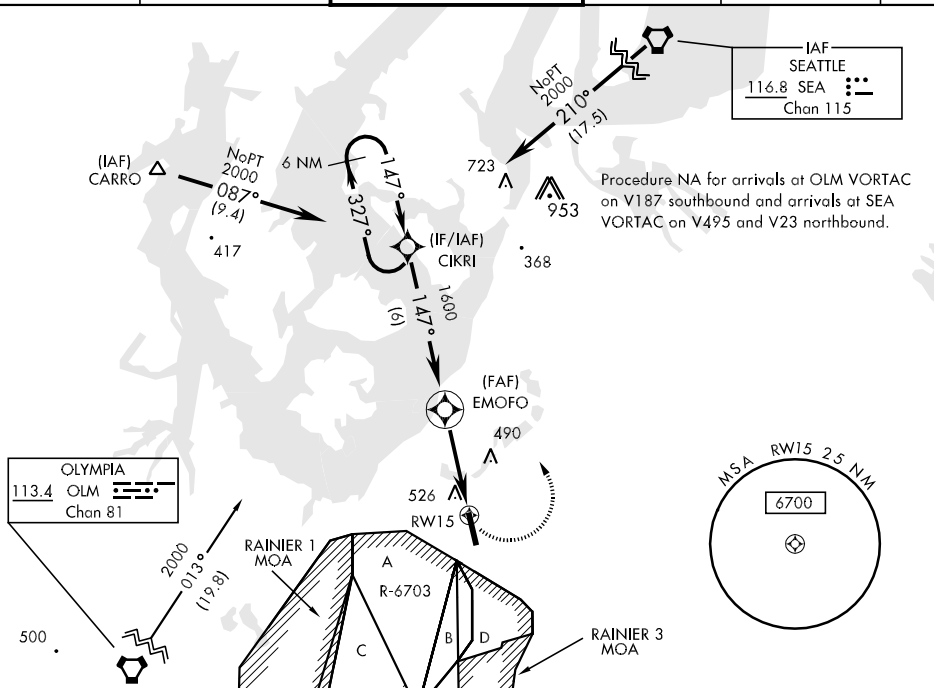
SEATTLE APP CON  
**120.1 290.9**

GRAY TOWER ★  
**119.325 (CTAF) 256.8**

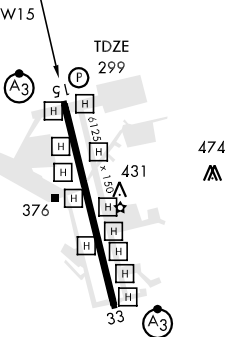
GND CON  
**121.9 290.2**

CLNC DEL  
**121.9 290.2**

PAR



ELEV 300

147°  
to RW15

VGSI and descent angles  
not coincident.

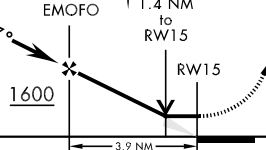
2000  
← 327°  
147° →

3.04°  
TCH 58

† VDP NA with  
McChord AFB  
altimeter setting.

2000

CIKRI



CATEGORY	A	B	C	D
LNAY MDA	780/24 481 (500-½)	780/40 481 (500-¾)	780/50 481 (500-1)	780/50 481 (500-1)
CIRCLING *	780-1 480 (500-1)	780-1½ 480 (500-1½)	860-2 560 (600-2)	860-2 560 (600-2)
McCHORD AFB ALTIMETER SETTING MINIMUMS				
LNAY MDA	800/24 501 (600-½)	800/50 501 (600-1)	800-1½ 500 (500-1½)	880-2 580 (600-2)
CIRCLING *	800-1 500 (500-1)	800-1½ 500 (500-1½)	880-2 580 (600-2)	880-2 580 (600-2)

APCH CRS	Rwy Idg	6125
327°	TDZE	300
	Arpt Elev	300

AL-413 [USA]

GRAY AAF (KGRF)



\* Circling not authorized W of Rwy 15-33.

SSALR



MISSED APPROACH: Climb to 2000  
direct CIKRI and hold.

DME/DME RNP-0.3 NA

ATIS

**124.65 306.2**

SEATTLE APP CON

120.1 290.9

GRAY TOWER ★

119.325 (CTAF) 256.8

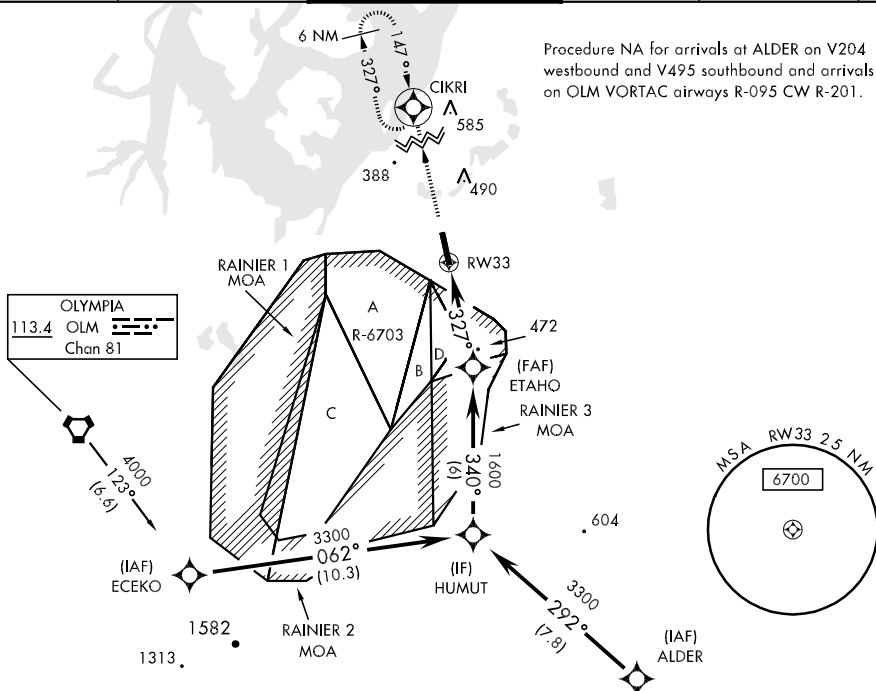
GND CON

121.9 290.2

CLNC DEL

121.9 290.2

PAR



2000



CIKRI



† VDP NA with McChord AFB altimeter setting.

HUMUT

3300

†1.3 NM to  
RW33

ETAI

3

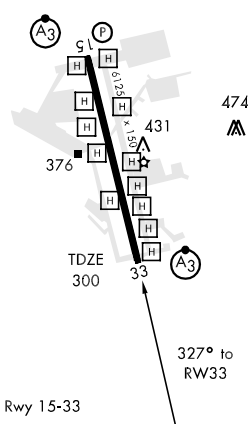
TCH

CATEGORY	A	B	C	D
INAV MDA	780-½ 480	(500-½)	780-¾ 480 (500-¾)	780-1 480 (500-1)
CIRCLING *	780-1 480	(500-1)	780-1½ 480 (500-1½)	860-2 560 (600-2)

## McCHORD AFB ALTITUDE SETTING MINIMUMS

LNAV MDA	800-1/2	500	(500-1/2)	800-3/4 500 (500-3/4)	800-1 500 (500-1)
CIRCLING *	800-1	500	(500-1)	800-1 1/2 500 (500-1 1/2)	880-2 580 (600-2)

FLEV 300



FORT LEWIS, WASHINGTON

47°05'N-122°35'W

GRAY AAF (KGRF)

Orig 10182

RNAV (GPS) RWY 33

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

**FORT LEWIS** (See GRAY AAF—JOINT BASE LEWIS-MCCORD)**FRIDAY HARBOR****FRIDAY HARBOR** (FHR) 0 SW UTC-8(-7DT) N48°31.32' W123°01.46'

SEATTLE

L-1E

IAP

113 B S4 FUEL 100 LRA NOTAM FILE FHR

RWY 16-34: H3402X75 (ASP) S-12.5 MIRL 0.8% up N

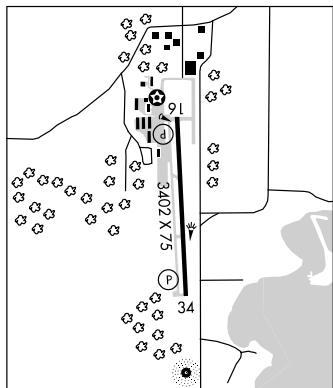
RWY 16: PAPI(P4R)—GA 4.0° TCH 38'. Building. Rgt tfc.

RWY 34: REIL. PAPI(P4L)—GA 3.5° TCH 40'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended 1600-0100Z±. Fuel system self svc with credit card. Noise abatement procedures in effect ctc arpt manager 360-378-4724. Preferred Rwy 16 in calm wind conditions. Due to high concentration of tfc invof arpt recommend ldg lgts or forward visibility lgts turned on while utilizing arpt. Rwy 16 PAPI baffled W of centerline, lateral coverage has been narrowed to avoid obstacles during descent, maintain highest possible altitude and close alignment to rwy centerline. Acft in excess of 12,500 lbs charged fee based on weight and time of year—ctc arpt manager for information. Soft ground between tiedowns west parking area. Limited transient parking avbl during summer. ACTIVATE MRL Rwy 16-34 and REIL Rwy 34—CTAF. ACTIVATE rotating bcn—CTAF. Ldg fee—Acft in excess of 12,500 lbs charged, fee based on weight—ctc arpt manager for info.

**WEATHER DATA SOURCES:** ASOS 135.675 (360) 378-8491.**COMMUNICATIONS:** CTAF 128.25**(R) WHIDBEY APP/DEP CON** 118.2**RADIO AIDS TO NAVIGATION:** NOTAM FILE BLI.**WHATCOM (H) VORTACW** 113.0 HUH Chan 77 N48°56.72' W122°34.76' 195° 31.0 NM to fld. 83/20E.

HIWAS.

**NDB (MHW)** 284 FHR N48°30.73' W123°01.43' at fld. NOTAM FILE FHR.**FRIDAY HARBOR SPB** (W33) 0 NE UTC-8(-7DT) N48°32.24' W123°00.58'

SEATTLE

00 LRA NOTAM FILE SEA

**WATERWAY 03-21:** 10000X2000 (WATER)**WATERWAY 12-30:** 6000X1000 (WATER)

**SEAPLANE REMARKS:** Unattended. All tkfs should be performed N of Browns Island. Seaplanes ops warning lgts OTS indef. US customs user fee arpt. Flight Notification Service (ADCUS) available.

**COMMUNICATIONS:** CTAF 128.25**GOHEEN** (See BATTLE GROUND)**GOLDENDALE** (S20) 1 NW UTC-8(-7DT) N45°49.93' W120°50.72'

SEATTLE

L-13A

1678 B NOTAM FILE SEA

RWY 07-25: H3491X40 (ASP) S-4 MIRL

RWY 07: REIL. Fence. RWY 25: REIL. SAVASI (S2L). Thld dsplcd 330'. Trees.

**AIRPORT REMARKS:** Unattended. NSTD white line crosses rwy near Rwy 07 marking. NSTD white line crosses rwy near Rwy 25 marking.

**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE DLS.**CLICKITAT (H) VORW/DME** 112.3 LTJ Chan 70 N45°42.81' W121°06.05' 035° 12.9 NM to fld. 3220/21E.

HIWAS.

**GRAND COULEE DAM** (See ELECTRIC CITY)**GRANT CO** (See MOSES LAKE)

NDB FHR <b>284</b>	APP CRS <b>339°</b>	Rwy Idg TDZE Apt Elev	<b>3402</b> <b>108</b> <b>113</b>
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# NDB RWY 34

FRIDAY HARBOR (FHR)



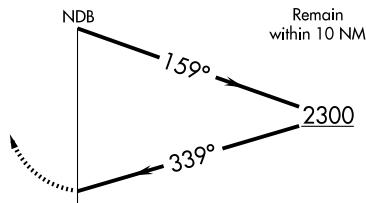
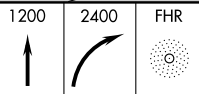
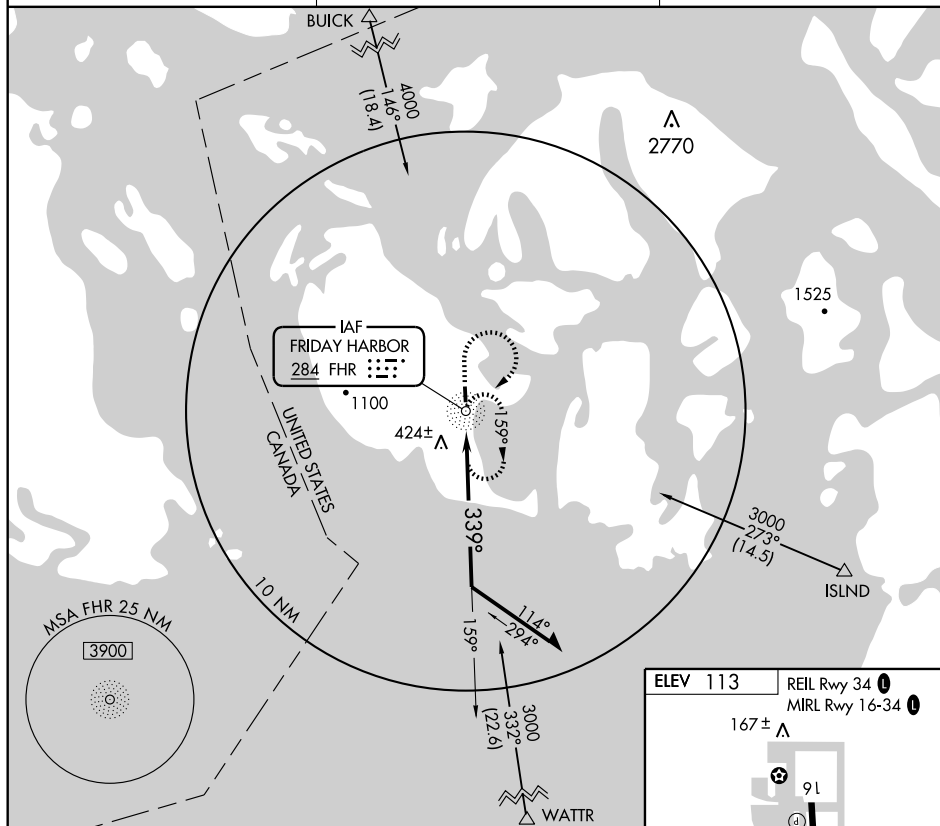
Circling NA west of Rwy 16-34.  
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 1200 then climbing right turn to 2400 direct FHR NDB and hold, continue climb-in-hold to 2400.

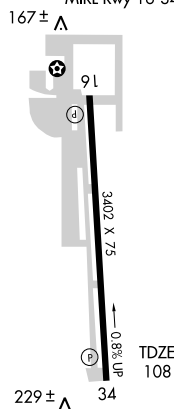
ASOS  
**135.675**

WHIDBEY APP CON  
**118.2 285.65**

CTAF  
**128.25**



ELEV 113	REIL Rwy 34
	MIRL Rwy 16-34



CATEGORY	A	B	C	D
S-34	800-1	692 (700-1)	800-2 692 (700-2)	NA
CIRCLING	800-1	687 (700-1)	820-2 707 (800-2)	NA

WAAS CH <b>40024</b> <b>W34A</b>	APP CRS <b>337°</b>	Rwy Idg <b>3402</b> TDZE <b>108</b> Apt Elev <b>113</b>
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## RNAV (GPS) RWY 34

FRIDAY HARBOR (FHR)

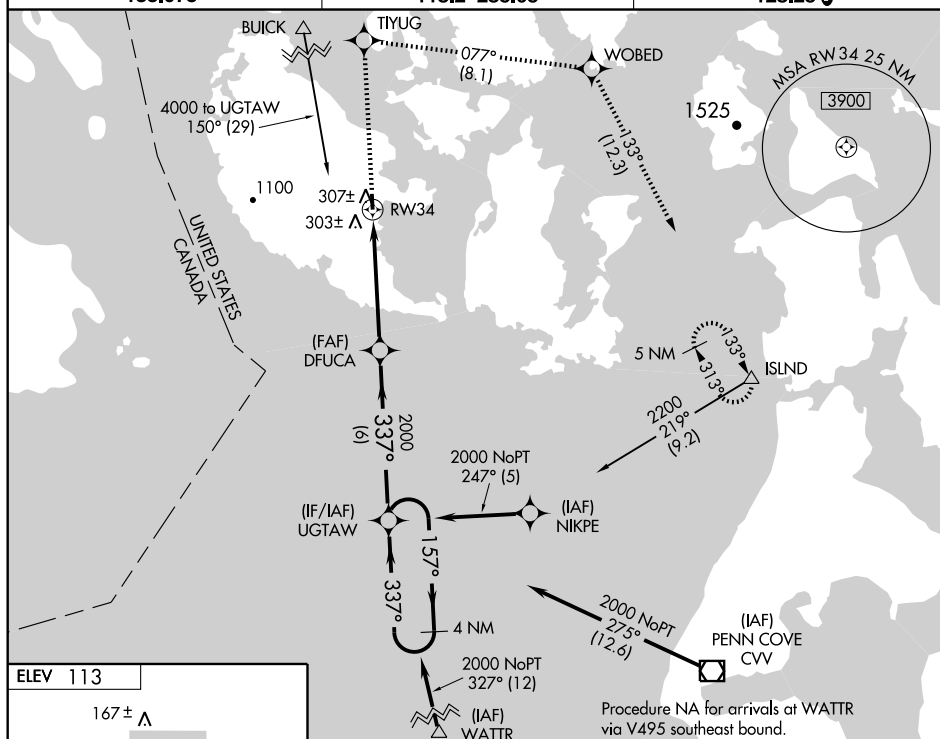
**V** DME/DME RNP-0.3 NA. Circling not authorized west of Rwy 16-34.  
Baro-VNAV NA below -30°C (-22°F).  
When VGSI inoperative, procedure NA at night.

MISSED APPROACH: Climb to 5000 direct  
TIYUG and via 077° track to WOBED  
and via 133° track to ISLND and hold.

ASOS  
**135.675**

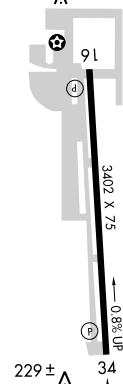
WHIDBEY APP CON  
**118.2 285.65**

CTAF  
**128.25**



ELEV 113

167±



REIL Rwy 34  
MIRL Rwy 16-34

5000	TIYUG	077° TRK	WOBED	133° TRK	ISLND	UGTAW	4 NM Holding Pattern
							GS 3.50° TCH 40
CATEGORY	A	B	C	D			
LPV DA	500-1¼	392 (400-1¼)		NA			
LNAV/VNAV DA	580-1½	472 (500-1½)		NA			
LNAV MDA	640-1	532 (600-1)	640-1½ 532 (600-1½)	NA			
CIRCLING	780-1½	667 (700-1½)	800-2 687 (700-2)	NA			

## HOQUIAM

**BOWERMAN** (HOM) 2 W UTC-8(-7DT) N46°58.27' W123°56.19'

18 B S4 FUEL 100LL, JET A1+ LRA NOTAM FILE HOM

RWY 06-24: H5000X150 (ASPH) S-30, D-40, 2D-80 HIRL

RWY 06: REIL. VASI(V4R)—GA 3.0° TCH 52'. Tree. Rgt tfc.

RWY 24: MALSR. VASI(V4L)—GA 3.0° TCH 50'.

**AIRPORT REMARKS:** Attended Mon–Fri 1700–0100Z†. 100LL avbl 24 hrs a day with Credit Card. For Jet A call 360–533–6655 between 1700–0100Z† or call 360–310–0201 between 0100–1700Z†. Flocks of waterfowl on and in vicinity of arpt. 103’ crane 0.2 NM southwest of AER 24. Service road south of rwy in primary surface. Ultralights prohibited without written permission from arpt manager. ACTIVATE HIRL Rwy 06–24, MALSR Rwy 24 and REIL Rwy 06—CTAF.

**WEATHER DATA SOURCES:** ASOS 135.775 (360) 538-7021. HIWAS 117.7  
HOM.

**COMMUNICATIONS: CTAF/UNICOM 122.7**

RCO 122.2 (SEATTLE RADIO)

SEATTLE CENTER APP/DEP CON 128.3

**AIRSPACE:** CLASS E syc 1400-0600Z± other times CLASS G.

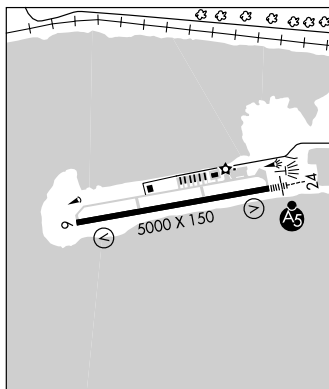
RADIO AIDS TO NAVIGATION: NOTAM FILE HOM.

HOQUIAM (H) VORTACW 117.7    HOM    Chan 124    N46°56.82'

W124°08.96' 062° 8.9 NM to fld. 10/19E. **HIWAS.**

ABERN NDB (LOM) 236 HQ N46°59.26' W123°47.86' 241° 5.8 NM to fld. LOM unusable 150°–180° byd 10 NM

ILS/DME 108.7	I-HOM	Chan 24	Rwy 24	LOM ABERN NDB. LOM unusable 150°–180° bwd 10 NM.
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**HOSKINS FLD** (See OLYMPIA)

## ILWACO

PORT OF ILWACO (7W1) 2 E UTC-8(-7DT) N46°18.90' W124°00.23'

13 B NOTAM FILE SEA

RWY 10-28: H2080X50 (ASPH) S-5 MIRL

**RWY 10:** Road **RWY 28:** PAPI(P2L)—GA 4.0°. Thld dspld 300'. Road.

**AIRPORT REMARKS:** Unattended. ACTIVATE MIRL Rwy 10-28—CTAF.

**COMMUNICATIONS: CTAF 122.9**

**IONE MUNI** (S23) 2 S UTC-8(-7DT) N48°42.48' W117°24.78'

2108 B NOTAM FILE SEA

RWY 15-33: H4059X45 (ASPH) MIRL

RWY 15: Fence. RWY 33: PAPI(P2L)—GA 3.0° TCH 35'.

**AIRPORT REMARKS:** Unattended. Wildlife invof rwy. MIRL Rwy 15-33 pilot controlled lighting med and high ints out of svc indefinitely. ACTIVATE MIRL Rwy 15-33-CTAF.

**COMMUNICATIONS: CTAF 122.9**

**RADIO AIDS TO NAVIGATION: NOTAM FILE GEG**

**SPOKANE (H) VORTAC** 115.5 GEG Chan 102 N47°33.90' W117°37.61' 346° 69.2 NM to fld. 2756/21E.

HIWAS.

NDB (MHW) 379 ION N48°42.61' W117°24.82' at fld. NOTAM FILE SEA. VFR use only.

HELIPAD H1: H60X60 (CONC) MIRL

JEFFERSON CO INTL (See PORT TOWNSEND)

**JUMP-OFF-JOE** N46°06.24' W119°07.92'

RCO 122.4 (SEATTLE RADIO)

## KAHLOTUS

**LOWER MONUMENTAL STATE** (W09) 5 S UTC-8(-7DT) N46°33.03' W118°32.18'

813 NOTAM FILE SEA

RWY 01-19: 3300X50 (GRVL)

RWY 01: Tower. Rwy 19: P-line.

**AIRPORT REMARKS:** Unattended. CLOSED Oct 1 thru Jun 1. Multiple power lines 0.4 mi NNE of arpt. Rwy marked with retro reflective devices. Rwy 01-19 has steep canyon walls N, E and S. Pedestrians, vehicles and animals on and in/ov rwy. Portions of rwy sfc rough and soft. Contact Washington State Aviation Division 360-651-6300 or 1-800-552-0666 for facility information prior to using.

**COMMUNICATIONS: CTAF 122.9**



LOC/DME I-HQM <b>108.7</b> Chan <b>24</b>	APP CRS <b>241°</b>	Rwy Idg <b>5000</b> TDZE <b>16</b> Apt Elev <b>18</b>
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# ILS or LOC/DME RWY 24

HOQUIAM/ BOWERMAN (HQM)

**V** For inoperative MALS, increase S-LOC Cats A and B visibility to 1 mile.  
Circling NA northwest of Rwy 6-24.  
Inoperative table does not apply to S-ILS Rwy 24.  
When local altimeter setting not received, procedure NA.

MALSR



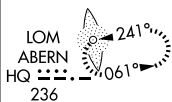
MISSED APPROACH: Climb to 2500  
direct HQM VORTAC and hold.

ASOS  
**135.775**

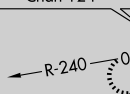
SEATTLE CENTER  
**128.3 269.0**

UNICOM  
**122.7 (CTAF) 0**

ALTERNATE MISSED  
APCH FIX



HOQUIAM  
**117.7** HQM  
Chan 124



2900 to NEYDI  
061° (14.7)

LOCALIZER  
I-HQM  
Chan 24

LOM  
ABERN  
236 HQ

WIMET  
I-HQM [3]

OGELE  
I-HQM [0.9]

NEYDI  
I-HQM [6.3]

WIMET  
I-HQM [3]

OGELE  
I-HQM [0.9]

NEYDI  
I-HQM [6.3]

WIMET  
I-HQM [3]

OGELE  
I-HQM [0.9]

NEYDI  
I-HQM [6.3]

WIMET  
I-HQM [3]

OGELE  
I-HQM [0.9]

NEYDI  
I-HQM [6.3]

WIMET  
I-HQM [3]

OGELE  
I-HQM [0.9]

NEYDI  
I-HQM [6.3]

WIMET  
I-HQM [3]

OGELE  
I-HQM [0.9]

NEYDI  
I-HQM [6.3]

WIMET  
I-HQM [3]

OGELE  
I-HQM [0.9]

NEYDI  
I-HQM [6.3]

WIMET  
I-HQM [3]

OGELE  
I-HQM [0.9]

NEYDI  
I-HQM [6.3]

DME REQUIRED

2500  
↑  
HQM  
**117.7**

VGSI and ILS glidepath  
not coincident.  
Use I-HQM DME when  
on LOC course.

NEYDI  
I-HQM [6.3]

Remain  
within 10 NM

OGELE  
I-HQM [0.9]

WIMET  
I-HQM [3]

2100

241°

2300

\*LOC only

OGELE  
I-HQM [0.9]

WIMET  
I-HQM [3]

2100

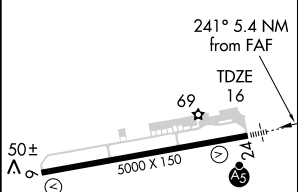
241°

2300

GS 3.50°  
TCH 55

CATEGORY	A	B	C	D
S-ILS 24	216-¾ 200 (200-¾)		286-1 270 (300-1)	NA
S-LOC 24	580-¾ 564 (600-¾)		580-1 564 (600-1)	NA
CIRCLING	580-1 562 (600-1)		580-1½ 562 (600-1½)	NA

ELEV 18



REIL Rwy 6 0  
HIRL Rwy 6-24 0

WAAS CH <b>82015</b> <b>W06A</b>	APP CRS <b>061°</b>	Rwy Idg <b>5000</b> TDZE <b>18</b> Apt Elev <b>18</b>
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# RNAV (GPS) RWY 6

HOQUIAM/ BOWERMAN (HQM)

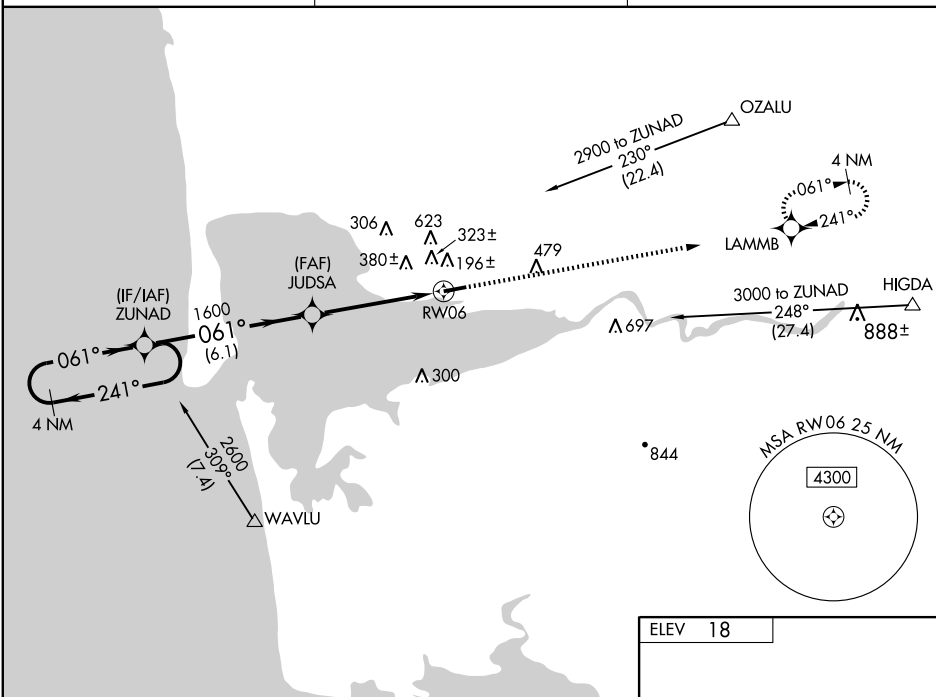
**⚠** Circling NA northwest of Rwy 6-24.  
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).  
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 2900 direct LAMMB and hold.

ASOS  
**135.775**

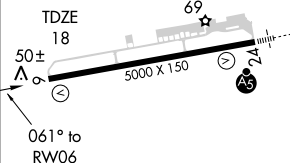
SEATTLE CENTER  
**128.3 269.0**

UNICOM  
**122.7 (CTAF) 0**



4 NM Holding Pattern				
ZUNAD				
2600 ← 241° / 061° →				
GS 3.00° TCH 52				
JUDSA 1600				
RW06				
6.1 NM 4.7 NM				
CATEGORY	A	B	C	D
LPV DA	308-1 290 (300-1)			
LNAV/VNAV DA	758-2½ 740 (800-2½)			
LNAV MDA	620-1 602 (700-1)	620-1¾ 602 (700-1¾)	620-2 602 (700-2)	
CIRCLING	620-1 602 (700-1)	620-1¾ 602 (700-1¾)	620-2 602 (700-2)	

ELEV **18**



REIL Rwy 6 **0**  
HIRL Rwy 6-24 **0**

HOQUIAM, WASHINGTON  
Amdt 1 22OCT09

46°58'N - 123°56'W

HOQUIAM/ BOWERMAN (HQM)  
**RNAV (GPS) RWY 6**

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH <b>86902</b> <b>W24A</b>	APP CRS <b>241°</b>	Rwy Idg <b>5000</b> TDZE <b>16</b> Apt Elev <b>18</b>
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**RNAV (GPS) RWY 24**

HOQUIAM/ BOWERMAN (HQM)

**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 47°C (116°F). Inoperative table does not apply to LPV.  
**▲** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
 For inoperative MALS, increase LNAV Cat A visibility to 1 mile.  
 Circling NA northwest of Rwy 6-24.  
 When local altimeter setting not received, procedure NA.

MALS



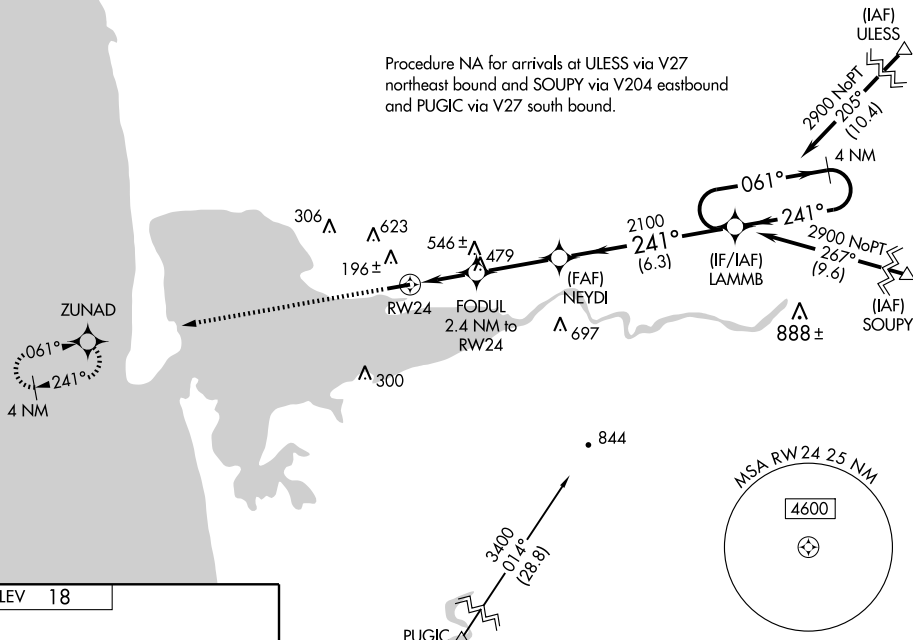
**MISSED APPROACH:** Climb to 2600  
direct ZUNAD and hold.

ASOS  
**135.775**

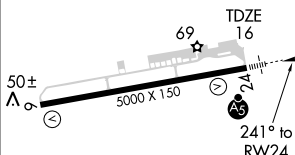
SEATTLE CENTER  
**128.3 269.0**

UNICOM  
**122.7 (CTAF) 0**

Procedure NA for arrivals at ULESS via V27  
northeast bound and SOUPY via V204 eastbound  
and PUGIC via V27 south bound.



ELEV 18



REIL Rwy 6 **0**  
HIRL Rwy 6-24 **0**

2600		ZUNAD	VGS and RNAV glidepath not coincident.		LAMMB	4 NM Holding Pattern
			FODUL 2.4 NM to RW24	NEYDI	2100	2900
		RW24	2.4 NM	3 NM	6.3 NM	
CATEGORY	A	B	C	D		
LPV DA	216- <sup>3</sup> / <sub>4</sub>	200 (200- <sup>3</sup> / <sub>4</sub> )	286-1 270 (300-1)	NA		
LNAV/VNAV DA	1029-2 <sup>1</sup> / <sub>2</sub> 1013 (1100-2 <sup>1</sup> / <sub>2</sub> )				NA	
LNAV MDA	800- <sup>3</sup> / <sub>4</sub>	784 (800- <sup>3</sup> / <sub>4</sub> )	800-1 <sup>3</sup> / <sub>4</sub> 784 (800-1 <sup>3</sup> / <sub>4</sub> )	NA		
CIRCLING	800-1 782 (800-1)	800-1 <sup>1</sup> / <sub>4</sub> 782 (800-1 <sup>1</sup> / <sub>4</sub> )	800-2 <sup>1</sup> / <sub>4</sub> 782 (800-2 <sup>1</sup> / <sub>4</sub> )	NA		

HOQUIAM, WASHINGTON  
Amdt 1 22OCT09

46°58'N - 123°56'W

HOQUIAM/ BOWERMAN (HQM)  
**RNAV (GPS) RWY 24**

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

VORTAC HQM  
**117.7**  
 Chan **124**

APP CRS  
**241°**

Rwy Idg  
 TDZE **16**  
 Apt Elev **18**

**VOR/DME RWY 24**  
 HOQUIAM/ BOWERMAN (HQM)

**V**  
**A** Circling NA northwest of Rwy 6 and 24.  
 Visibility reduction by helicopters NA.



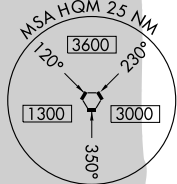
MISSED APPROACH: Climb to 2500 via HQM VORTAC  
 R-061 to HQM VORTAC and hold.

ASOS  
**135.775**

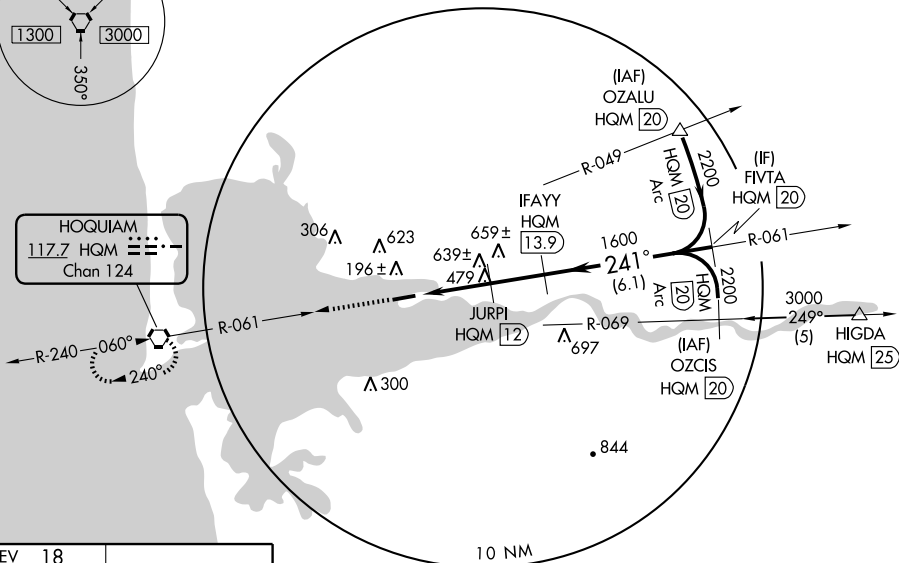
SEATTLE CENTER  
**128.3 269.0**

UNICOM  
**122.7 (CTAF) 0**

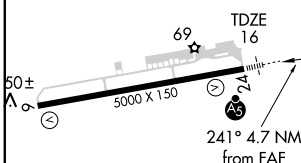
Procedure NA for arrivals at OZCIS via V204 eastbound.



HOQUIAM  
 117.7 HQM  
 Chan 124



ELEV 18



	2500	HQM		FIVTA HQM [20]
	HQM R-061	117.7		2200
	JURPI HQM [12]	IFAYY HQM [13.9]		
	HQM [9.3]	3.10° TCH 52		
	960	1600		
	2.8 NM	1.9 NM	6.1 NM	
CATEGORY	A	B	C	D
S-24	900-3/4	884 (900-3/4)	900-2 1/4 884 (900-2 1/4)	900-2 1/2 884 (900-2 1/2)
CIRCLING	900-1 1/4	882 (900-1 1/4)	900-2 3/4 882 (900-2 3/4)	900-3 882 (900-3)

REIL Rwy 6 0  
 HIRL Rwy 6-24 0

HOQUIAM, WASHINGTON  
 Amdt 6 09295

46°58'N - 123°56'W

HOQUIAM/ BOWERMAN (HQM)  
**VOR/DME RWY 24**

VORTAC HQM <b>117.7</b> Chan <b>124</b>	APP CRS <b>062°</b>	Rwy Idg TDZE Apt Elev <b>18</b>
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**VOR RWY 6**  
HOQUIAM/ BOWERMAN (HQM)

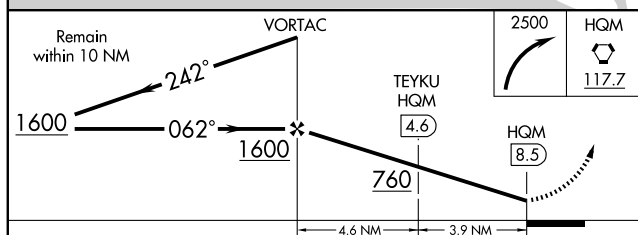
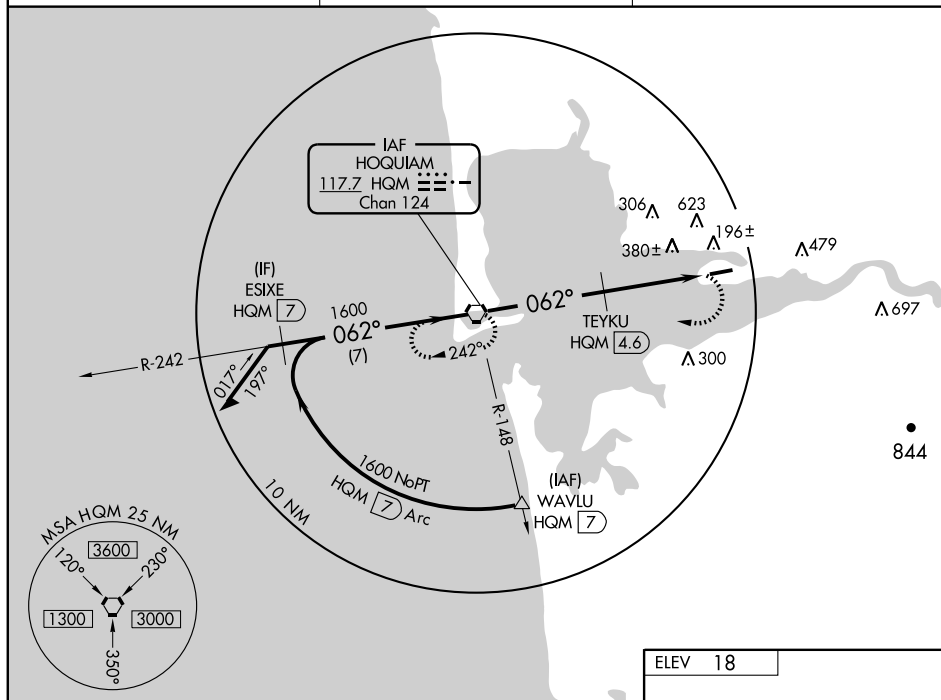
**V** Visibility reduction by helicopters NA.  
**A** Circling NA northwest of Rwy 6 and 24.

MISSED APPROACH: Climbing right turn to 2500 direct HQM  
VORTAC and hold.

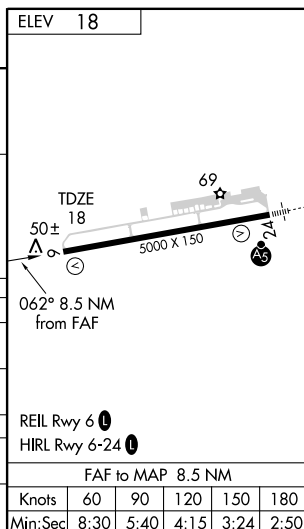
ASOS  
**135.775**

SEATTLE CENTER  
**128.3 269.0**

UNICOM  
**122.7 (CTAF) 1**



CATEGORY	A	B	C	D
S-6	760-1 742 (800-1)	760-1¼ 742 (800-1¼)	760-2¼ 742 (800-2¼)	760-2½ 742 (800-2½)
CIRCLING	760-1 742 (800-1)	760-1¼ 742 (800-1¼)	760-2¼ 742 (800-2¼)	760-2½ 742 (800-2½)
TEYKU FIX MINIMUMS				
S-6	640-1 622 (700-1)	640-1¾ 622 (700-1¾)	640-2 622 (700-2)	
CIRCLING	640-1 622 (700-1)	640-1¾ 622 (700-1¾)	640-2 622 (700-2)	



**KELSO** N46°09.33' W122°54.76' NOTAM FILE KLS  
**NDB (MHW)** 256 LSO 148° 2.3 NM to Southwest Washington Rgnl.  
 NDB unusable 020°–120°, 120°–180° byd 15 NM, 180°–340° byd 10 NM.

SEATTLE

**KELSO**

**SOUTHWEST WASHINGTON RGNL** (KLS) 2 SE UTC–8(–7DT) N46°07.08' W122°53.90'

SEATTLE

20 B S4 FUEL 100LL, JET A LRA NOTAM FILE KLS

L-1C

**Rwy 12–30:** H4391X100 (ASPH) S–38, D–46, 2D–74 MRL (NSTD)

IAP

**Rwy 12:** REIL. PAPI(P4L)—GA 4.0° TCH 37'. Trees. Rgt tfc.

**Rwy 30:** REIL. PAPI(P4R)—GA 4.0° TCH 40'. Trees.

**AIRPORT REMARKS:** Attended Winter 1600–0100Z†, Summer 1600–0200Z†. 24 hr self-service credit card fuel facility. Numerous flocks of birds on and in/ovf arpt. Rwy 12–30 NSTD spacing MRL. ACTIVATE MRL Rwy 12–30—CTAF. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** AWOS–3 135.075 (360) 577–1964.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.25 (SEATTLE RADIO)

RCO 122.55 (SEATTLE RADIO)

® **SEATTLE CENTER APP/DEP CON** 124.2

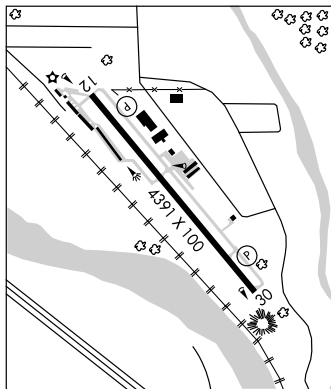
**RADIO AIDS TO NAVIGATION:** NOTAM FILE PDX.

**BATTLE GROUND (H) VORTACW** 116.6 BTG Chan 113 N45°44.87' W122°35.49' 309° 25.7 NM to fld. 253/21E.

**KELSO NDB (MHW)** 256 LSO N46°09.33' W122°54.76'

148° 2.3 NM to fld. NOTAM FILE KLS.

NDB unusable 020°–120°, 120°–180° byd 15 NM, 180°–340° byd 10 NM.

**KENMORE AIR HARBOR SPB** (See SEATTLE)

**KENMORE AIR HARBOR INC SPB** (S60) 1 S UTC–8(–7DT) N47°45.29' W122°15.56'

SEATTLE

14 S4 FUEL 100LL, JET A LRA NOTAM FILE SEA

**WATERWAY 16–34:** 10000X1000 (WATER)

**WATERWAY 18–36:** 3000X1000 (WATER)

**SEAPLANE REMARKS:** Attended dawn–dusk. Unlighted crane 75' AGL and pilings 6' above water Waterway 18 8 buoys mark 5 miles per hour speed limit area. Landing zone–unlgt; seaplanes exempt from 5 miles per hour speed limit. Surface watercraft entering operating area from within channel E of waterway 16–34. Flight Notification Service (ADCUS) available.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

**KENNEWICK**

**VISTA FLD** (S98) 3 NW UTC–8(–7DT) N46°13.12' W119°12.60'

SEATTLE

534 B S4 FUEL 100LL, JET A TPA–1334 (800) NOTAM FILE SEA

L–13A

**Rwy 02–20:** H4008X150 (ASPH) S–26 MRL

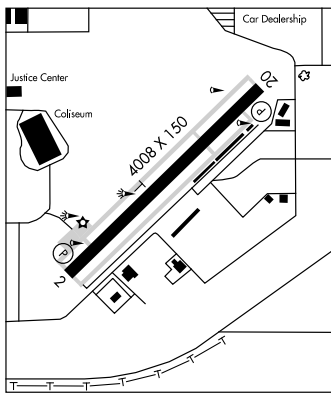
**Rwy 02:** PAPI(P2L). P–line. **Rwy 20:** PAPI(P2L). Pole.

**AIRPORT REMARKS:** Attended Mon–Fri 1600–0200Z†. Use Rwy 02 when wind 5 knots or less. ACTIVATE MRL Rwy 02–20—CTAF. Parachute Jumping.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PSC.

**PASCO (L) VORW/DME** 108.4 PSC Chan 21 N46°15.78' W119°06.94' 216° 4.8 NM to fld. 400/20E.



NDB-A

NDB LSO <b>256</b>	APP CRS <b>152°</b>	Rwy Idg TDZE Apt Elev	N/A N/A <b>20</b>
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KELSO/SOUTHWEST WASHINGTON RGNL (KLS)

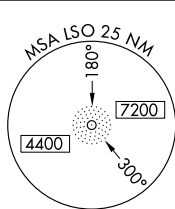
**NA** Circling NA NE of Rwy 12-30.  
When local altimeter setting not received, use Scappoose  
altimeter setting and increase all MDA 60 feet.

**MISSED APPROACH:** Climb to 2000 via heading 152°  
then climbing right turn to 4000 direct LSO NDB and hold,  
continue climb-in-hold to 4000.

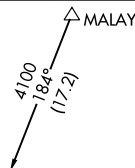
AWOS-3  
**135.075**

SEATTLE CENTER  
**124.2 317.6**

UNICOM  
**122.8 (CTAF) 0**



A 2677



3286

10 NM

2200

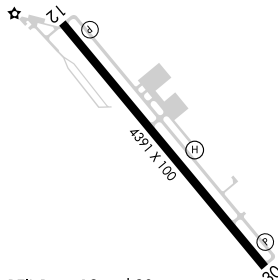
IAF  
KELSO  
**256** LSO

2600

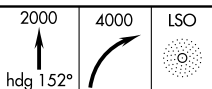
2760

ELEV 20

152° 2 NM  
from FAF

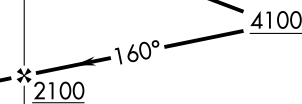


REIL Rwys 12 and 30  
MIRL Rwy 12-30



NDB

Remain  
within 10 NM



FAF to MAP 2 NM

CATEGORY	A	B	C	D
CIRCLING	1300-1¼ 1280 (1300-1¼)	1300-1½ 1280 (1300-1½)	NA	

KELSO, WASHINGTON  
Amdt 6 08APR10

KELSO/SOUTHWEST WASHINGTON RGNL (KLS)

46°07'N-122°54'W

NDB-A

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

APP CRS **123°**  
 Rwy Idg **4391**  
 TDZE **20**  
 Apt Elev **20**

# RNAV (GPS) RWY 12

KELSO/SOUTHWEST WASHINGTON RGNL (KLS)

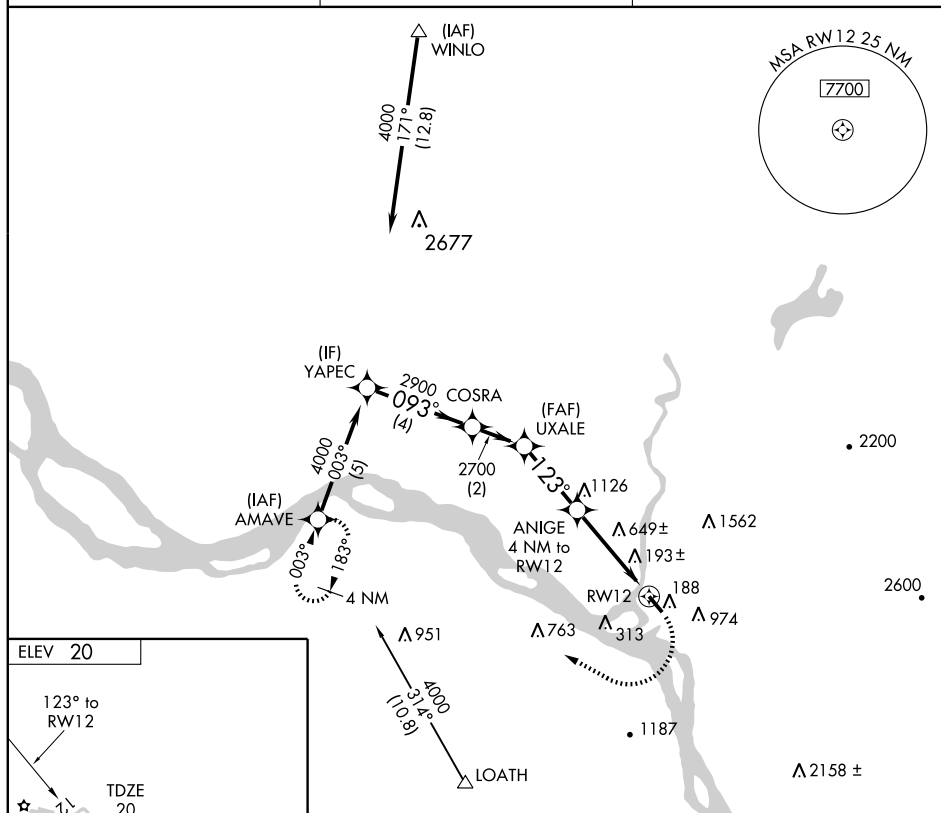
**▼** Circling NA northeast of Rwy 12-30. DME/DME RNP-0.3 NA.  
**▲** Visibility reduction by helicopters NA.  
 When local altimeter setting not received, use Scappoose altimeter setting and increase all MDA 60 feet and all Cat A visibility  $\frac{1}{4}$  mile.

**MISSED APPROACH:** Climbing right turn to 4000 direct AMAVE and hold, continue climb-in-hold to 4000.

AWOS-3  
**135.075**

SEATTLE CENTER  
**124.2 317.6**

UNICOM  
**122.8 (CTAF) 0**



ELEV 20

123° to RWY 12

TDZE 20

4391 x 100

REIL Rws 12 and 30  
 MIRL Rwy 12-30 0

Procedure Turn NA				
YAPEC	COSRA	UXALE	ANIGE	RWY 12
4000	2900	2700	1580	
093°	3.58° TCH 37	123°		
4 NM	2 NM	3 NM	4 NM	
CATEGORY	A	B	C	D
LNAV MDA	900-1 880 (900-1)	900-1 $\frac{1}{4}$ 880 (900-1 $\frac{1}{4}$ )	NA	
CIRCLING	900-1 880 (900-1)	900-1 $\frac{1}{4}$ 880 (900-1 $\frac{1}{4}$ )	NA	

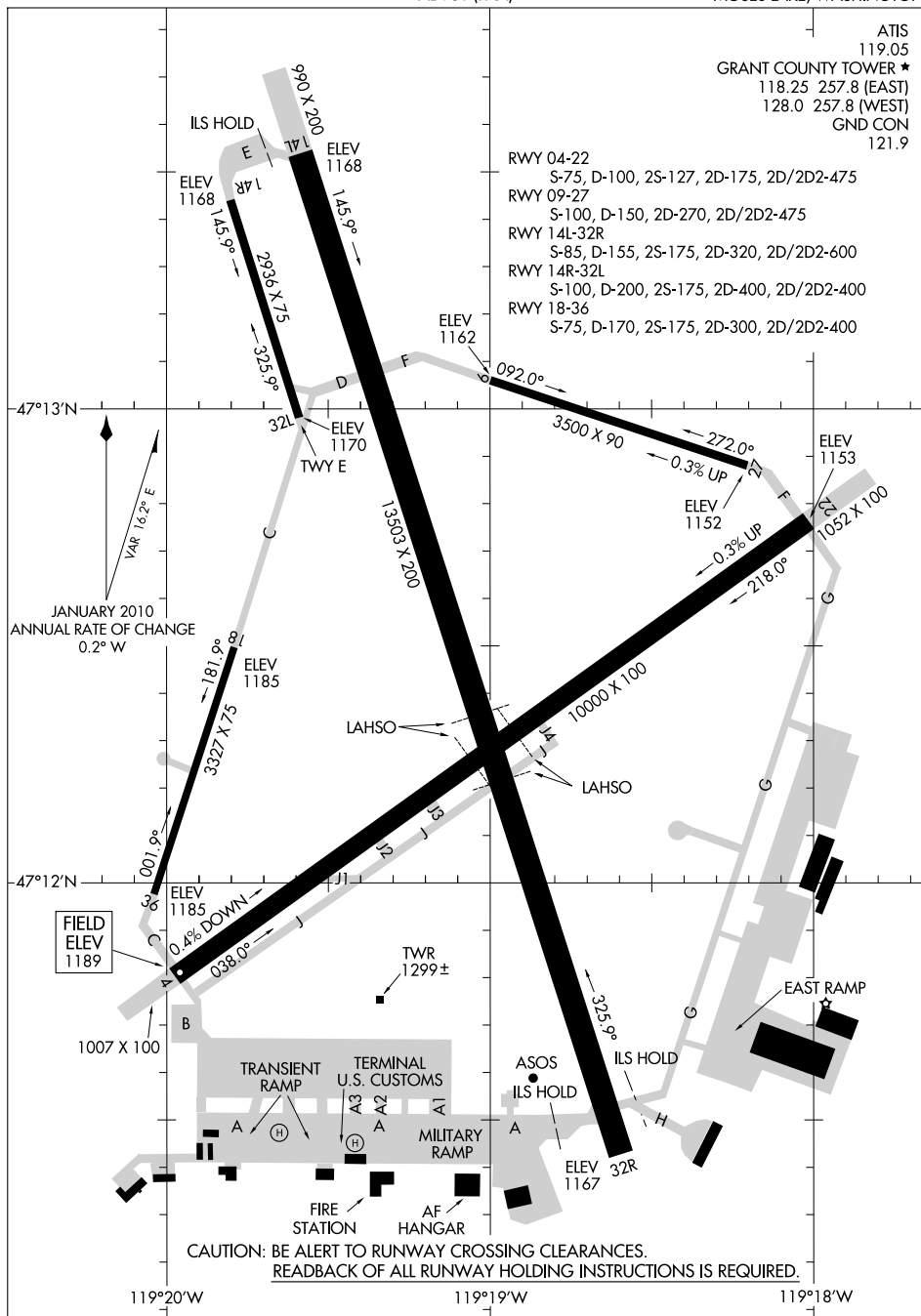


## AIRPORT DIAGRAM

AL-961 (FAA)

MOSES LAKE/GRANT COUNTY INTL (MWH)

MOSES LAKE, WASHINGTON



# AIRPORT DIAGRAM

MOSES LAKE, WASHINGTON

MOSES LAKE/GRANT COUNTY INTL (MWH)

## MOSES LAKE

GRANT CO INTL (MWH) 5 NW UTC-8(-7DT) N47°12.52' W119°19.15'

SEATTLE

1189 B S4 FUEL 100, 100LL, JET A1 OX 1 ARFF Index—See Remarks NOTAM FILE MWH H-1C, L-13A  
RWY 14L-32R: H1350X200 (ASPH-CONC-GRVD) S-85, D-155, 2S-175, 2D-320, 2D/2D2-600 IAP, AD

HIRL (NSTD)

RWY 14L: REIL. VASI(V6L)—GA 3.0° TCH 52'. Bldg.

RWY 32R: MALSR. PAPI(P4L)—GA 3.0° TCH 75'. Rgt tfc.

RWY 04-22: H1000X100 (ASPH-CONC-GRVD) S-75, D-100, 2S-127, 2D-175, 2D/2D2-475 MIRL

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 50'. 0.4% down.

RWY 22: REIL. VASI(V4L)—GA 3.0° TCH 50'. Rgt. tfc. 0.3% up

RWY 09-27: H3500X90 (CONC-GRVD) S-100, D-150, 2S-270, 2D/2D2-475 RWY LGTS (NSTD) 0.3% up NW

RWY 27: Rgt tfc.

RWY 18-36: H3327X75 (ASPH) S-75, D-170, 2S-175, 2D-300, 2D/2D2-400 MIRL

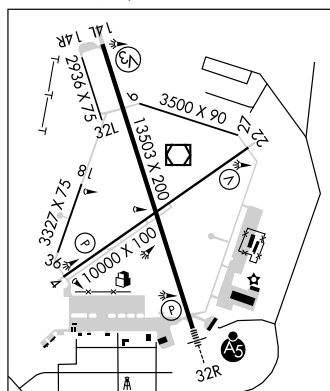
RWY 18: Rgt tfc.

RWY 14R-32L: H2936X75 (CONC) S-100, D-200, 2S-175, 2D-400, 2D/2D2-400

RWY 14R: Ground. Rgt tfc.

## LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 04	14L-32R	4700
RWY 14L	04-22	7550
RWY 22	14L-32R	4650
RWY 32R	04-22	5050



**AIRPORT REMARKS:** Attended continuously. Rwy 09-27 CLOSED except military ops. Rwy 14R-32L is CLOSED to all night ops except taxiing. Rwy 14L-32R is CLOSED nights 0600-1400Z except for special military night training operations. Flocks of large birds in vicinity of arpt. Class I, ARFF Index A. PPR for air carrier ops with more than 30 passenger seats 0600-1400Z or for additional ARFF index level svc call arpt manager 509-762-5363/5304. Rwy 09-27 used as assault strip by C-17 acft. Rwy 09-27 and Twy F not visible from the twr. Rwy 18-36 available as air carrier twy movement area only. Rwy 09-27 military landing zone lights only. Rwy distance markers Rwy 14L-32R and Rwy 04-22. Rwy 14L-32R first 10,000' apch end of Rwy 32R grvd 150' wide. Twy G unlighted. Extensive heavy military jet acft night training 1900 PM-0300 AM local daily. Announce landing intentions on CTAF after twr closed. Heavy jet training surface to 5000' within 25 miles of arpt, possible wake turbulence from larger acft using Rwy 14L-32R. Rwy 14L-32R NSTD HIRL located 50' from rwy edge markings. ACTIVATE MALSR Rwy 32R—CTAF.

**WEATHER DATA SOURCES:** ASOS (509) 762-5082. LAWRS.**COMMUNICATIONS:** CTAF 118.25 ATIS 119.05 UNICOM 122.95

MOSES LAKE RCO 122.4 (SEATTLE RADIO)

Ⓡ APP/DEP CON 126.4 134.35 (1400-0600Z) SEATTLE CENTER APP/DEP CON 126.1 (0600-1400Z)

TOWER 128.0 (WEST) 118.25 (EAST) (1400-0600Z) GND CON 121.9

**AIRSPACE:** CLASS D svc 1400-0600Z other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE MWH.

MOSES LAKE (H) VORW/DME 115.0 MWH Chan 97 N47°12.65' W119°19.01' at fld. 1194/18E.

PELLELY NDB (MHW/LOM) 408 MW N47°06.94' W119°16.47' 324° 5.9 NM to fld. Unmonitored when tower closed.

ILS 109.5 I-MWH Rwy 32R. Class IE LOM PELLELY NDB. Unmonitored when tower closed.

MOSES LAKE MUNI (W20) 2 NE UTC-8(-7DT) N47°08.52' W119°14.27'

SEATTLE

1203 B S4 FUEL 100LL NOTAM FILE SEA

RWY 16-34: H2513X50 (ASPH) S-8 MIRL

RWY 16: PAPI (P2L)—GA 3.0° Thld dsplcd 466'. Tree. RWY 34: PAPI (P2L)—GA 3.0°. Thld dsplcd 253'. Rgt tfc.

**AIRPORT REMARKS:** Attended 1600-0100Z. Fuel avbl only Mon-Fri 1600-0100Z. Extensive agriculture opr in progress. Bird hazard. Ultralight opr requested to obtain airport safety briefing from airport management prior to initial use of airport.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

MT CONSTITUTION N48°40.79' W122°50.48'

SEATTLE

RCO 122.3 (SEATTLE RADIO)

L-1D

MT VERNON (See BURLINGTON/MT VERNON)

LOC I-MWH <b>109.5</b>	APP CRS <b>324°</b>	Rwy Idg TDZE <b>1167</b> Apt Elev <b>1189</b>
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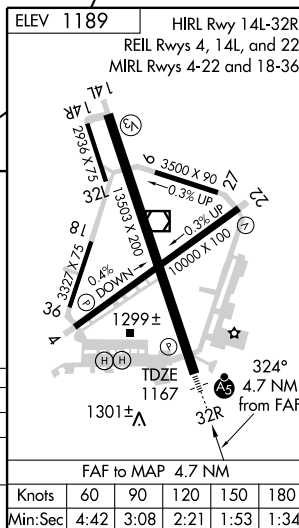
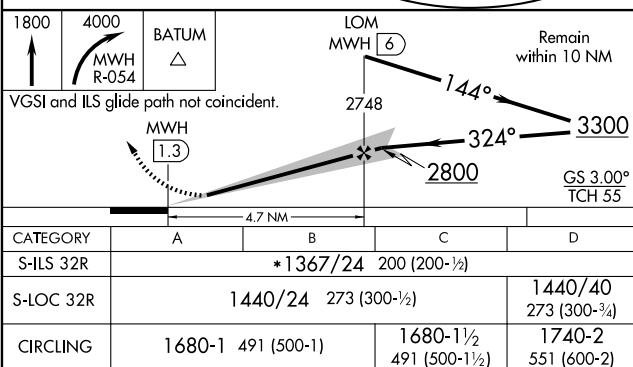
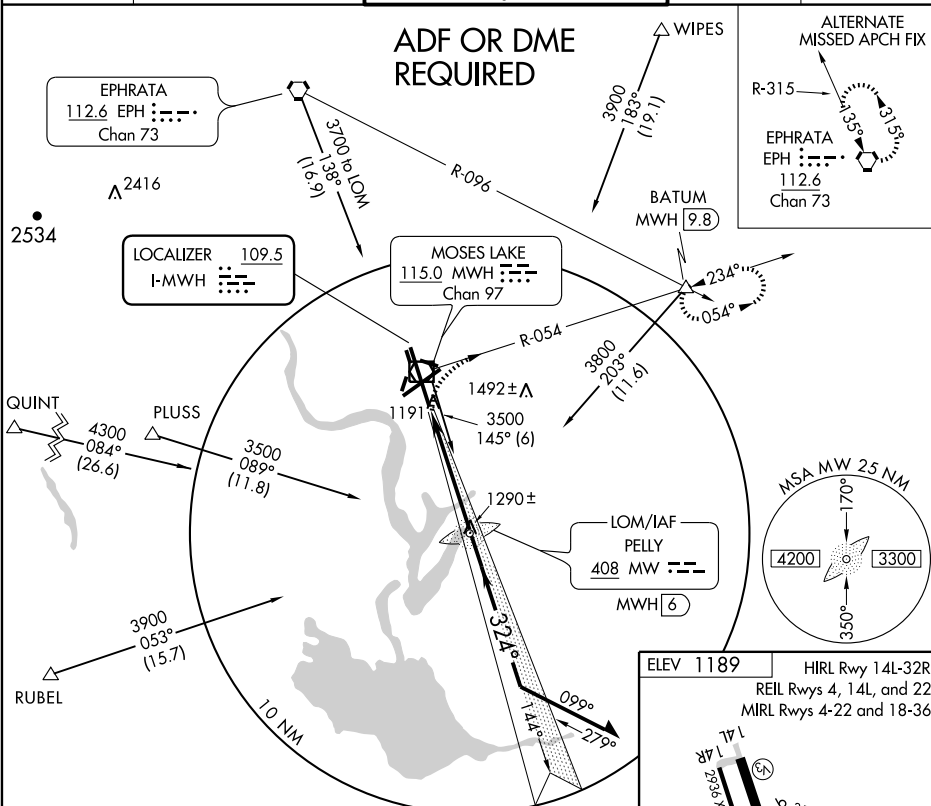
# ILS or LOC RWY 32R

MOSES LAKE/ GRANT COUNTY INTL (MWH)

▼ For inoperative MALSR, increase S-LOC 32R Cat. D visibility to RVR 5000.  
▲ If local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDAs 40 feet.  
\*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR  
MISSED APPROACH: Climb to 1800, then climbing right turn to 4000 via MWH R-054 to BATUM INT/ MWH 9.8 DME and hold, continue climb-in-hold to 4000.

ATIS <b>119.05</b>	GRANT COUNTY APP CON * <b>126.4 379.95</b>	GRANT COUNTY TOWER * <b>118.25 (CTAF) 128.0 257.8</b>	GND CON <b>121.9</b>	UNICOM <b>122.95</b>
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## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
BOZEMAN, MT			
GALLATIN FIELD (BZN)	12	03-21	6,841 feet
MOSES LAKE, WA			
GRANT COUNTY INTL (MWH)	04	14L-32R	4,700 feet
	14L	04-22	7,550 feet
	22	14L-32R	4,650 feet
	32R	04-22	5,050 feet
PORTLAND, OR			
PORTLAND-HILLSBORO (HIO)	12	02-20	4,922 feet
SALEM, OR			
M McNARY FIELD (SLE)	31	16-34	3,150 feet
	34	13-31	3,050 feet
SPOKANE, WA			
SPOKANE INTL (GEG)	07	03-21	2,800 feet
	21	07-25	7,000 feet
	25	03-21	4,350 feet
TWIN FALLS, ID			
JOSLIN FIELD-MAGIC VALLEY			
RG NL (TWF)	07	12-30	4,500 feet
	25	12-30	3,600 feet

## MOSES THREE DEPARTURE

SL-961 (FAA)

MOSES LAKE/GRANT COUNTY INTL (MWH)

MOSES LAKE, WASHINGTON

WENATCHEE  
111.0 EAT :--  
Chan 47  
N47°23.98' - W120°12.65'  
L-13

EPHRATA  
112.6 EPH :--  
Chan 73  
N47°22.68' - W119°25.44'  
L-13, H-1

ATIS 119.05  
GND CON  
121.9  
GRANT COUNTY TOWER ★  
118.25 (CTAF) 128.0 257.8  
GRANT COUNTY DEP CON ★  
126.4 379.95

SPOKANE  
115.5 GEG :--  
Chan 102  
N47°33.90' - W117°37.61'  
L-13, H-1

ELLENSBURG  
117.9 ELN :--  
Chan 126  
N47°01.46' - W120°27.51'  
L-13, H-1

MOSES LAKE  
115.0 MWH :--  
Chan 97  
N47°12.65' - W119°19.01'  
L-13, H-1

YAKIMA  
116.0 YKM :--  
Chan 107  
N46°34.22' - W120°26.68'  
L-13, H-1

PASCO  
108.4 PSC :--  
Chan 21  
N46°15.78' - W119°06.94'  
L-13

WALLA WALLA  
116.4 ALW :--  
Chan 111  
N46°05.22' - W118°17.55'  
L-13

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

ALL RUNWAYS: Fly runway heading, or ATC assigned heading, for vector to assigned route/fix. Maintain 5000' or ATC assigned altitude. Expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: If no transmissions received for 1 minute after departure, maintain runway heading, or ATC assigned heading to 6000', then climbing right turn to filed altitude, direct MWH VOR/DME, then via assigned fix/route.

## MOSES THREE DEPARTURE

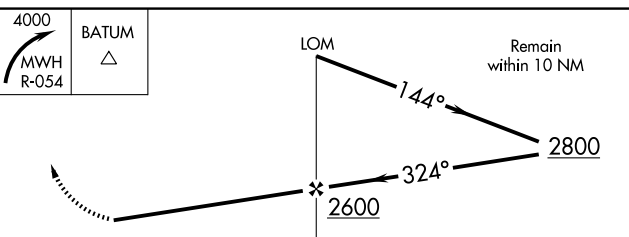
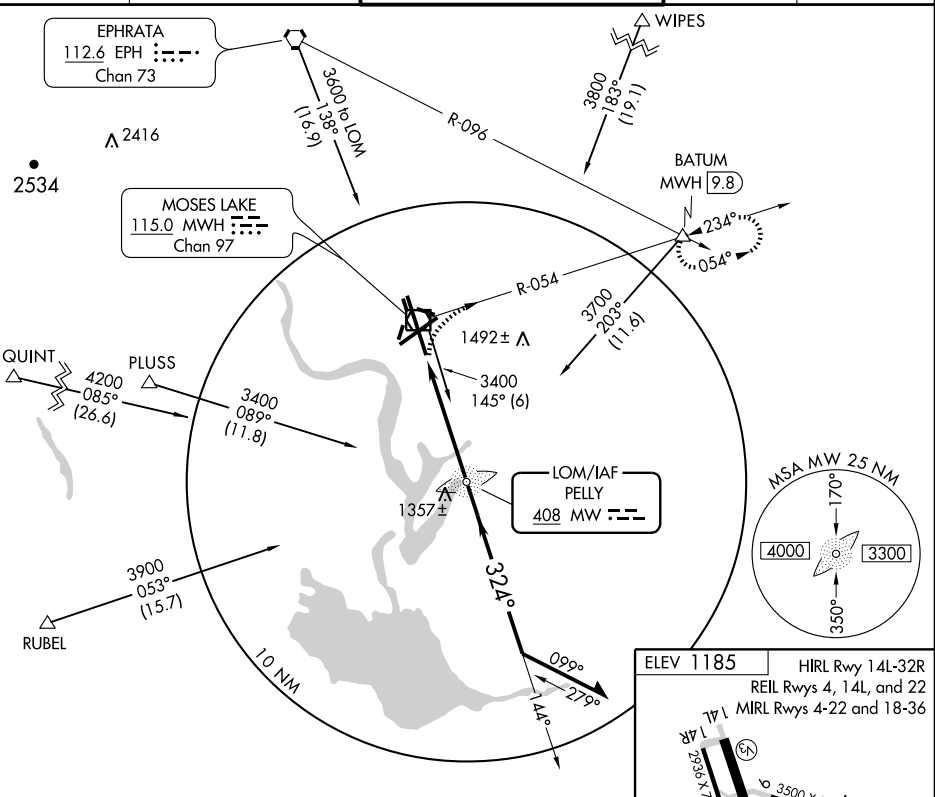
# NDB RWY 32R

MOSES LAKE/GRANT COUNTY INTL (MWH)

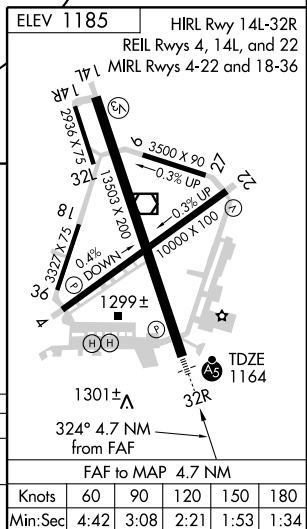
LOM MW <b>408</b>	APP CRS <b>324°</b>	Rwy Idg TDZE Apt Elev	<b>13503</b> <b>1164</b> <b>1185</b>
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<b>T</b> <b>A</b>	MALSR 	MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.
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ATIS <b>119.05</b>	GRANT COUNTY APP CON ★ <b>126.4 379.95</b>	GRANT COUNTY TOWER ★ <b>118.25 (CTAF) 128.0 257.8</b>	GND CON <b>121.9</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
S-32R	1680/40 516 (500-¾)		1680/50 516 (500-1)	1680-1½ 516 (500-1½)
CIRCLING	1680-1 495 (500-1)		1680-1½ 495 (500-1½)	1740-2 555 (600-2)



WAAS CH <b>42809</b> <b>W04A</b>	APP CRS <b>036°</b>	Rwy Idg <b>10000</b> TDZE <b>1189</b> Apt Elev <b>1189</b>
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# RNAV (GPS) RWY 4

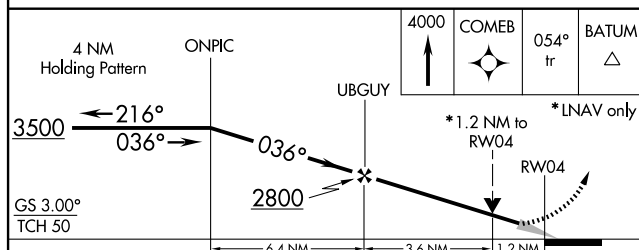
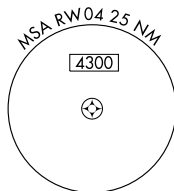
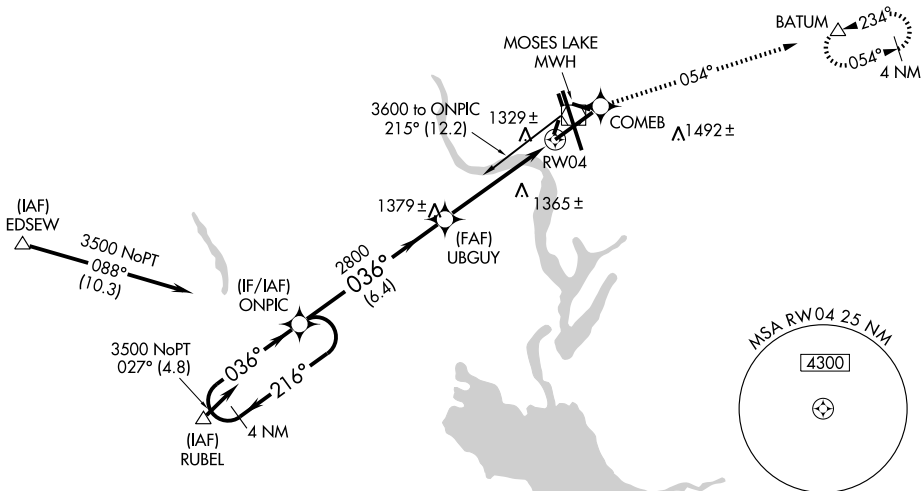
MOSES LAKE/ GRANT COUNTY INTL (MWH)

**⚠** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDA 40 feet and increase LPV all Cats and LNAV/VNAV all Cats visibility ¼ mile. Baro-VNAV and VDP NA when using Ephrata altimeter setting.

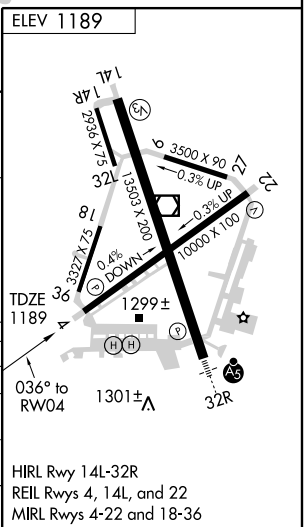
**MISSED APPROACH:** Climb to 4000 direct COMEB and via 054° track to BATUM and hold, continue climb-in-hold to 4000.

ATIS <b>119.05</b>	GRANT COUNTY APP CON * <b>126.4 379.95</b>	GRANT COUNTY TOWER * <b>118.25 (CTAF) 0 128.0 257.8</b>	GND CON <b>121.9</b>	UNICOM <b>122.95</b>
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- 2882 Procedure NA for arrivals on MWH VOR/DME airway radial 154 CW 253.
- 2534



CATEGORY	A	B	C	D
LPV DA		1439-3/4	250 (300-3/4)	
LNAV/VNAV DA		1636-1 1/2	447 (500-1 1/2)	
LNAV MDA	1620-1	431 (500-1)	1620-1 1/4 431 (500-1 1/4)	1620-1 1/2 431 (500-1 1/2)
CIRCLING	1660-1	471 (500-1)	1660-1 1/2 471 (500-1 1/2)	1740-2 551 (600-2)



WAAS CH <b>90509</b> <b>W14A</b>	APP CRS <b>144°</b>	Rwy Idg <b>13503</b> TDZE <b>1169</b> Apt Elev <b>1189</b>
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## RNAV (GPS) RWY 14L

MOSES LAKE/ GRANT COUNTY INTL (MWH)

- T** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Ephrata altimeter setting. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDA 40 feet and increase LPV all Cats and LNAV/VNAV all Cats visibility ¼ mile.

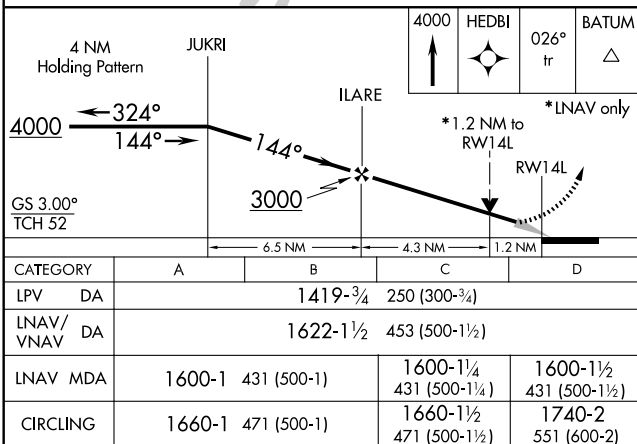
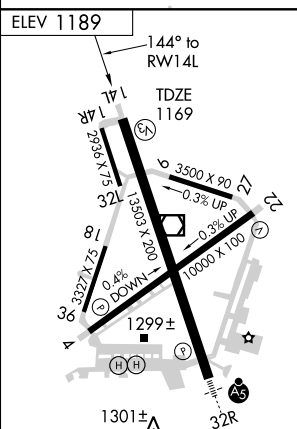
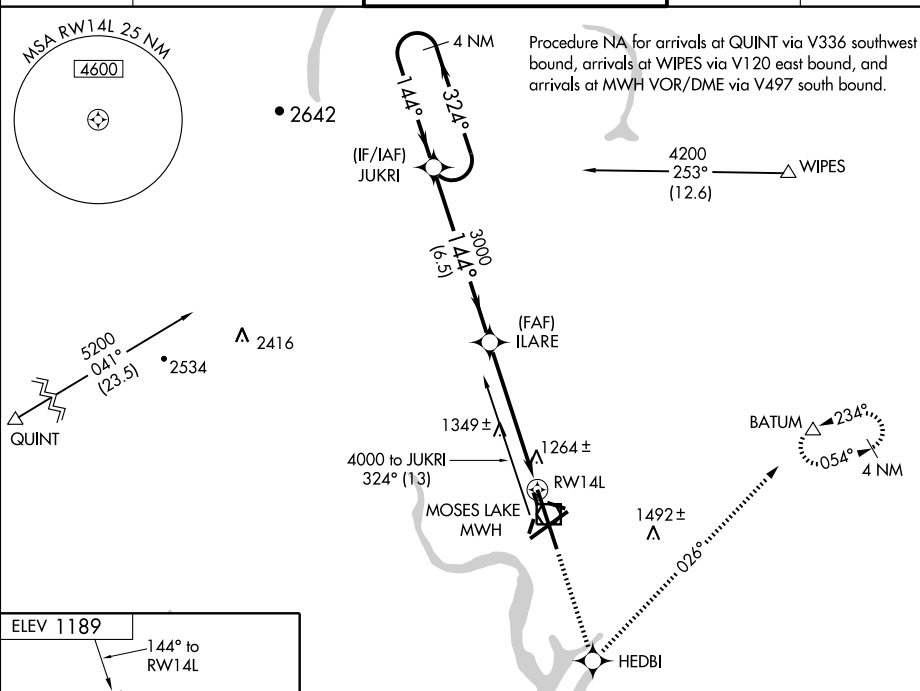
**MISSED APPROACH:** Climb to 4000 direct HEDBI and via 026° track to BATUM and hold, continue climb-in-hold to 4000.

ATIS  
**119.05**

GRANT COUNTY APP CON ★  
126.4 379.95

GRANT COUNTY TOWER ★  
118.25 (CTAF) **L** 128.0 257.8

GND CON  
**121.9**

UNICOM  
122.95

MOSES LAKE, WASHINGTON  
Orig 10210

MOSES LAKE/ GRANT COUNTY INTL (MWH)

47° 13'N - 119° 19'W

RNAV (GPS) RWY 14L



WAAS CH <b>70410</b> <b>W22A</b>	APP CRS <b>216°</b>	Rwy Idg TDZE Apt Elev	<b>10000</b> <b>1166</b> <b>1189</b>
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# RNAV (GPS) RWY 22

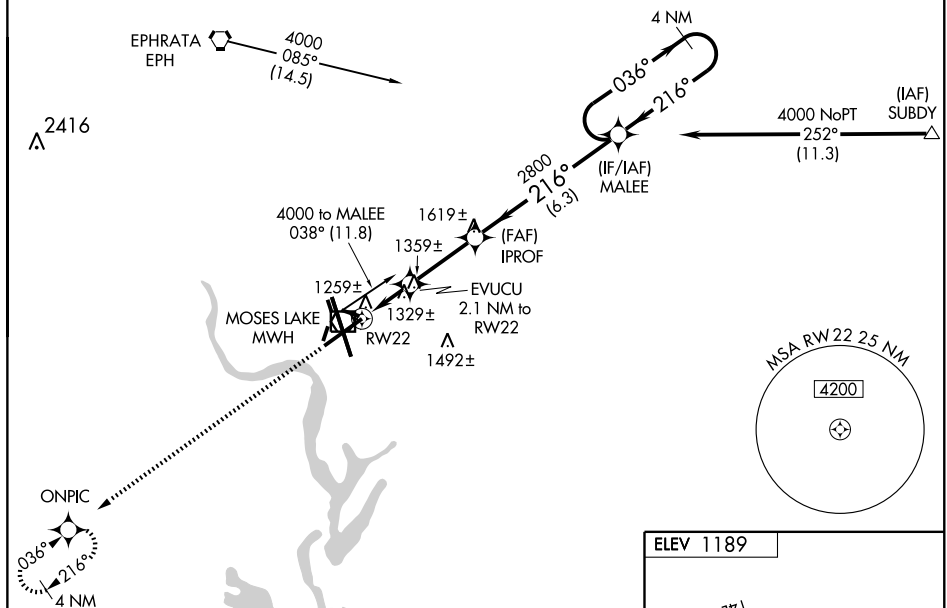
MOSES LAKE/ GRANT COUNTY INTL (MWH)

**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Ephrata altimeter setting. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDA 40 feet and increase LNAV/VNAV all Cats and LNAV Cat D visibility ½ mile.

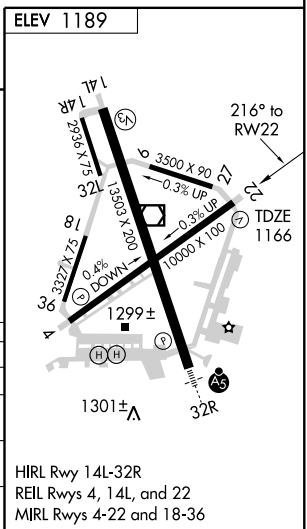
**MISSED APPROACH:** Climb to 3500 direct ONPIC and hold.

ATIS <b>119.05</b>	GRANT COUNTY APP CON * <b>126.4 379.95</b>	GRANT COUNTY TOWER * <b>118.25 (CTAF) 128.0 257.8</b>	GND CON <b>121.9</b>	UNICOM <b>122.95</b>
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Procedure NA for arrivals at EPH VORTAC via V120 westbound.



3500	ONPIC	EVUCU 2.1 NM to RW22	I PROF	MALEE 4 NM Holding Pattern	4000	GS 3.00° TCH 50
*LNAV only		*1.2 NM to RW22			2800	
		1.2 NM	0.9	2.9 NM	6.3 NM	
CATEGORY	A	B	C	D		
LPV DA		1416-1	250 (300-1)			
LNAV/VNAV DA		1529-1¼	363 (400-1¼)			
LNAV MDA	1580-1	414 (400-1)	1580-1¼	414 (400-1¼)		
CIRCLING	1660-1	471 (500-1)	1660-1½	471 (500-1½)	1740-2	551 (600-2)



HIRL Rwy 14L-32R  
REIL Rws 4, 14L, and 22  
MIRL Rws 4-22 and 18-36

WAAS CH <b>77799</b> <b>W32A</b>	APP CRS <b>324°</b>	Rwy Idg TDZE <b>1164</b> Apt Elev <b>1185</b>
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# RNAV (GPS) RWY 32R

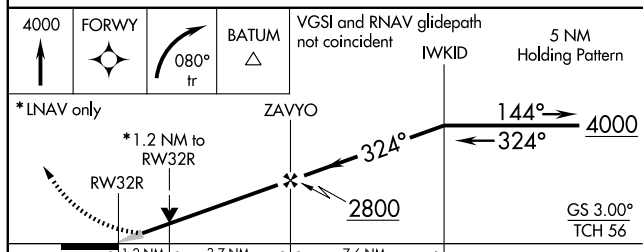
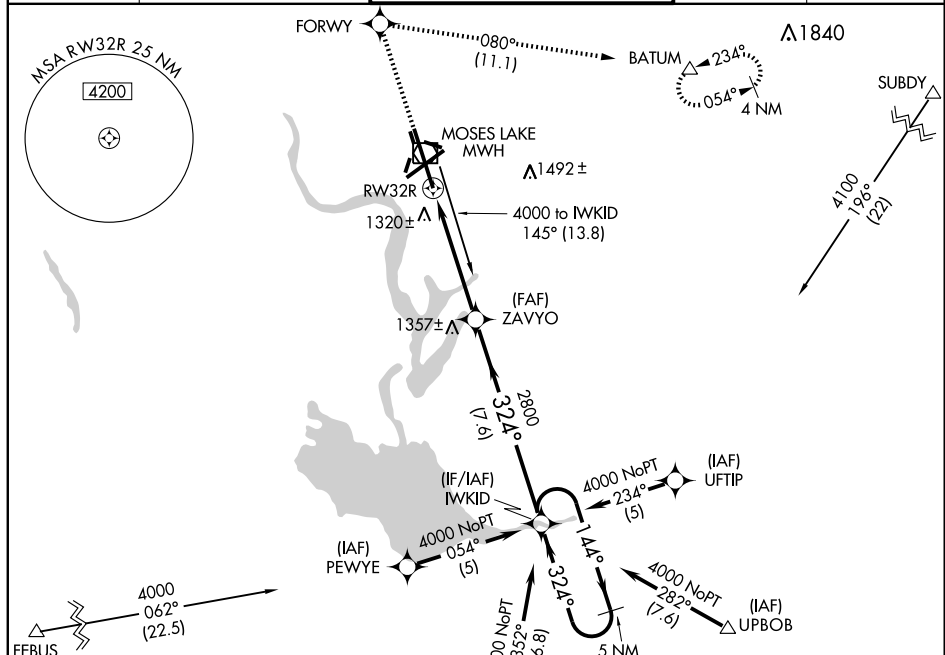
MOSES LAKE/GRANT COUNTY INTL (MWH)

**▼** DME/DME RNP-0.3 NA. Baro-VNAV NA below -17°C (1°F).  
For inoperative MALSR increase LPV all Cats visibility to RVR 4000,  
and LNAV Cat D visibility to 1½.

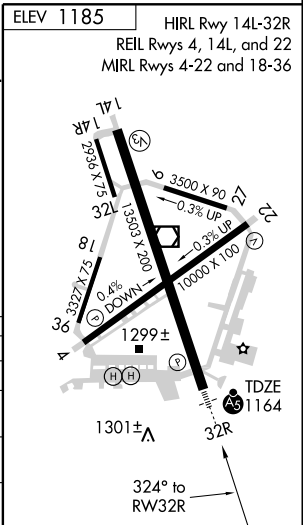


**MISSED APPROACH:** Climb to 4000 direct  
FORWY and right turn via 080° track to BATUM  
and hold, continue climb-in-hold to 4000.

ATIS <b>119.05</b>	GRANT COUNTY APP CON ★ <b>126.4 379.95</b>	GRANT COUNTY TOWER ★ <b>118.25 (CTAF) 128.0 257.8</b>	GND CON <b>121.9</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
LPV DA	1414/24		250 (300-½)	
LNAV/VNAV DA	1667/60		503 (500-1¼)	
LNAV MDA	1620/24 456 (500-½)		1620/40 456 (500-¾)	1620/50 456 (500-1)
CIRCLING	1680-1¾ 495 (500-1¾)		1740-2 555 (600-2)	



VORTAC EPH  
112.6  
Chan 73

APP CRS  
135°

Rwy ldg  
TDZE  
Apt Elev

13503  
1166  
1185

VOR-1 RWY 14L  
MOSES LAKE/GRANT COUNTY INTL (MWH)

MISSED APPROACH: Climbing left turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

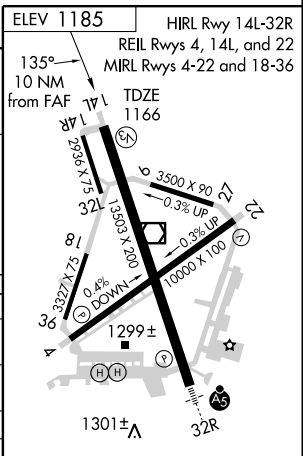
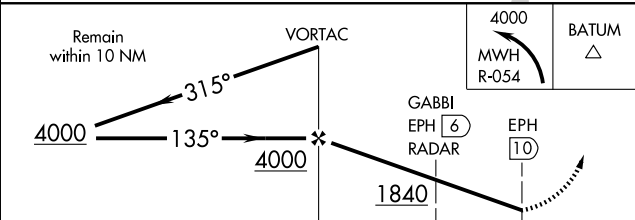
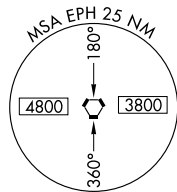
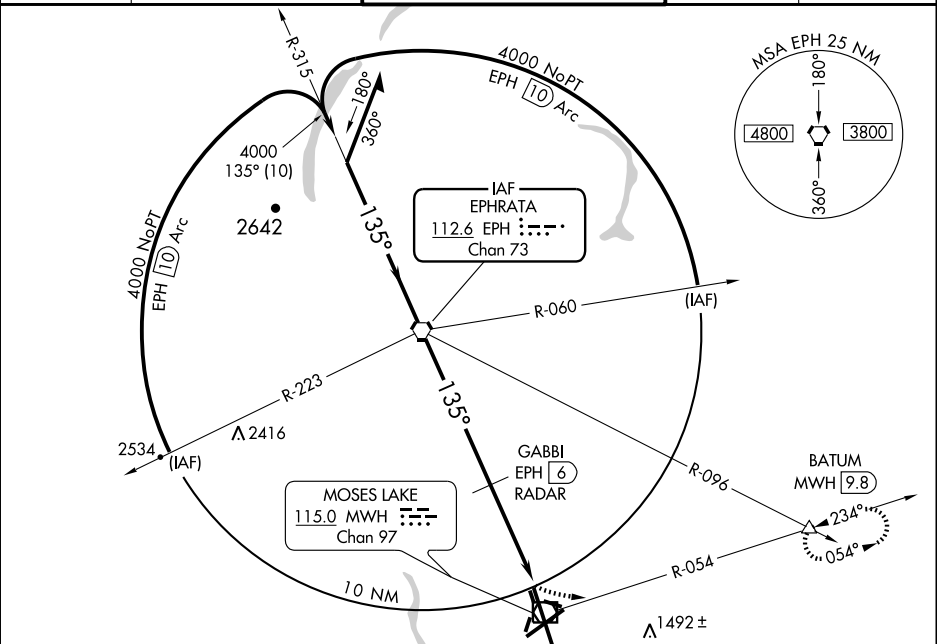
ATIS  
119.05

GRANT COUNTY APP CON \*  
126.4 379.95

GRANT COUNTY TOWER \*  
118.25 (CTAF) 128.0 257.8

GND CON  
121.9

UNICOM  
122.95



CATEGORY	A	B	C	D
S-14L	1840-1 674 (700-1)		1840-2 674 (700-2)	1840-2 1/4 674 (700-2 1/4)
CIRCLING	1840-1 655 (700-1)		1840-1 3/4 655 (700-1 3/4)	1840-2 655 (700-2)
GABBI DME or RADAR MINIMUMS				
S-14L	1640-1 474 (500-1)		1640-1 1/4 474 (500-1 1/4)	1640-1 1/2 474 (500-1 1/2)
CIRCLING	1680-1 495 (500-1)		1680-1 1/2 495 (500-1 1/2)	1740-2 555 (600-2)

FAF to MAP 10 NM					
Knots	60	90	120	150	180
Min:Sec	10:00	6:40	5:00	4:00	3:20

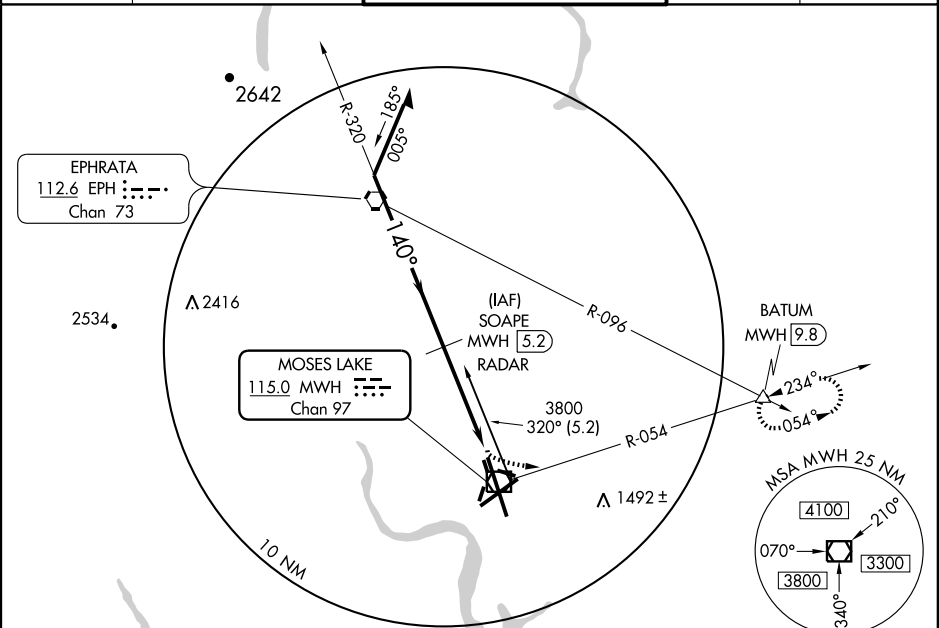
VOR/DME MWH <b>115.0</b> Chan <b>97</b>	APP CRS <b>140°</b>	Rwy Idg TDZE Apt Elev	<b>13503</b> <b>1166</b> <b>1185</b>
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# VOR-3 RWY 14L

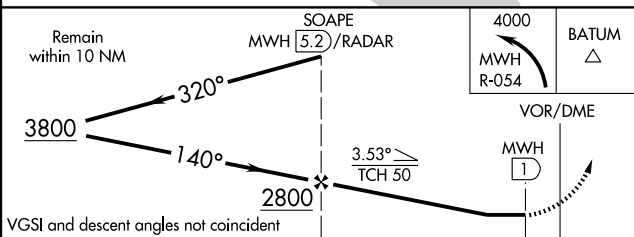
MOSES LAKE/ GRANT COUNTY INTL (MWH)

<b>V</b> <b>A</b>	MISSED APPROACH: Climbing left turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.
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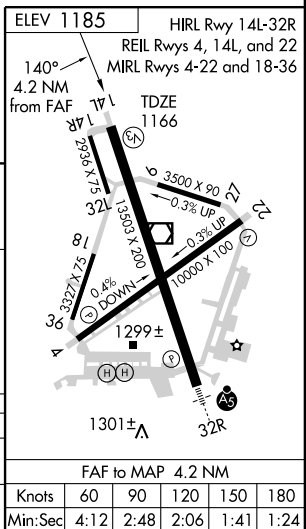
ATIS <b>119.05</b>	GRANT COUNTY APP CON * <b>126.4 379.95</b>	GRANT COUNTY TOWER * <b>118.25 (CTAF) 128.0 257.8</b>	GND CON <b>121.9</b>	UNICOM <b>122.95</b>
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## RADAR or DME REQUIRED



CATEGORY	A	B	C	D
S-14L	1620-1 454 (500-1)		1620-1 1/4 454 (500-1 1/4)	1620-1 1/2 454 (500-1 1/2)
CIRCLING	1680-1 495 (500-1)		1680-1 1/2 495 (500-1 1/2)	1740-2 555 (600-2)



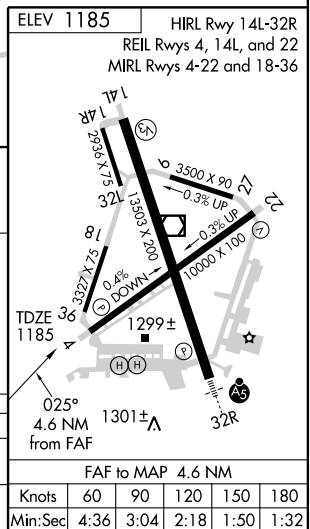
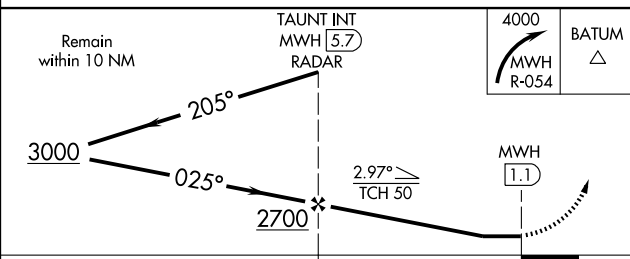
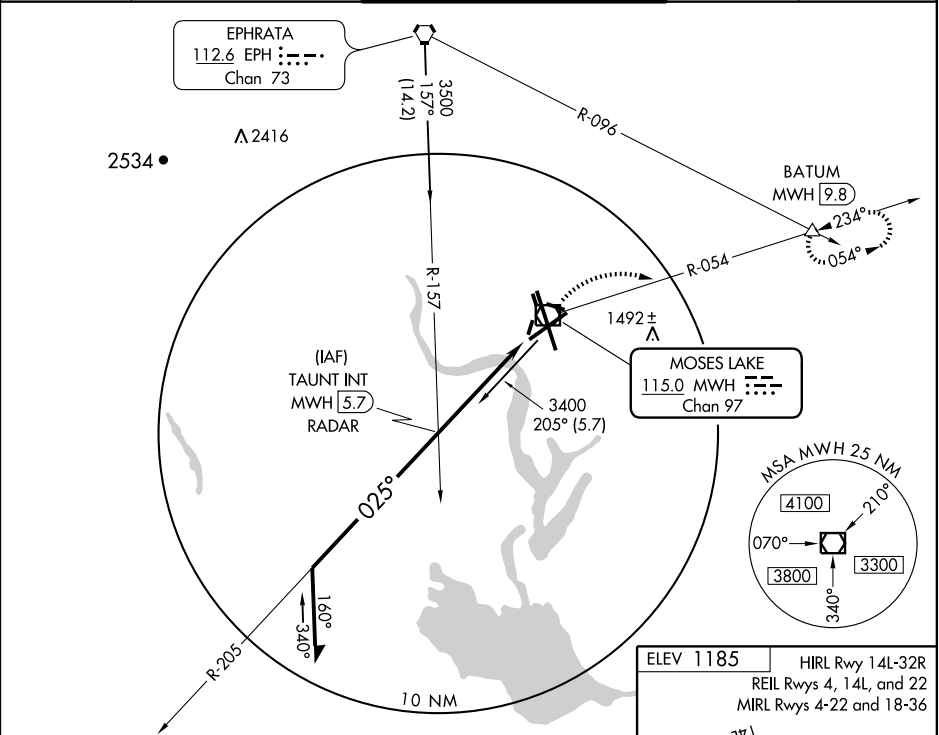
VOR/DME MWH <b>115.0</b> Chan <b>97</b>	APP CRS <b>025°</b>	Rwy Idg TDZE <b>1185</b> Apt Elev <b>1185</b>	<b>10000</b> <b>1185</b> <b>1185</b>
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# VOR RWY 4

MOSES LAKE/GRANT COUNTY INTL (MWH)

**MISSSED APPROACH:** Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

ATIS <b>119.05</b>	GRANT COUNTY APP CON ★ <b>126.4 379.95</b>	GRANT COUNTY TOWER ★ <b>118.25 (CTAF) 128.0 257.8</b>	GND CON <b>121.9</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
S-4	1620-1 435 (500-1)		1620-1¼ 435 (500-1¼)	1620-1½ 435 (500-1½)
CIRCLING	1680-1 495 (500-1)		1680-1½ 495 (500-1½)	1740-2 555 (600-2)

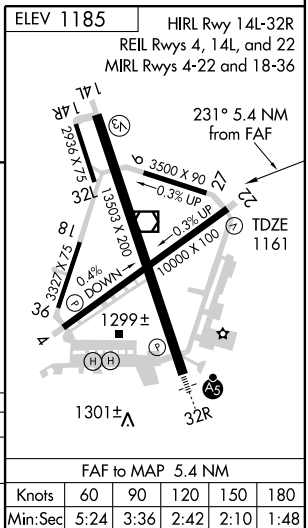
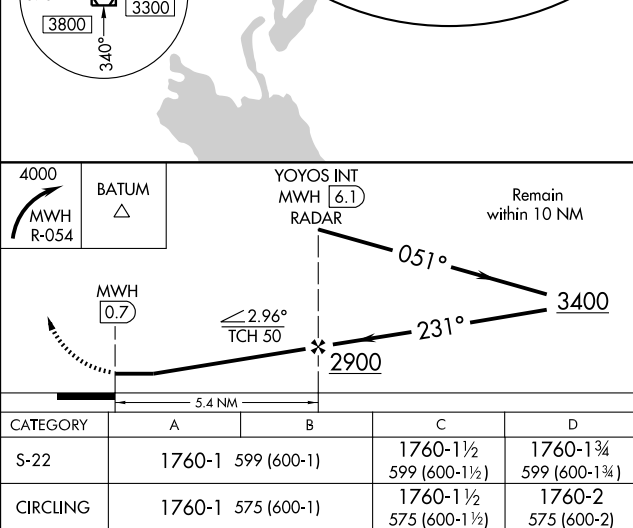
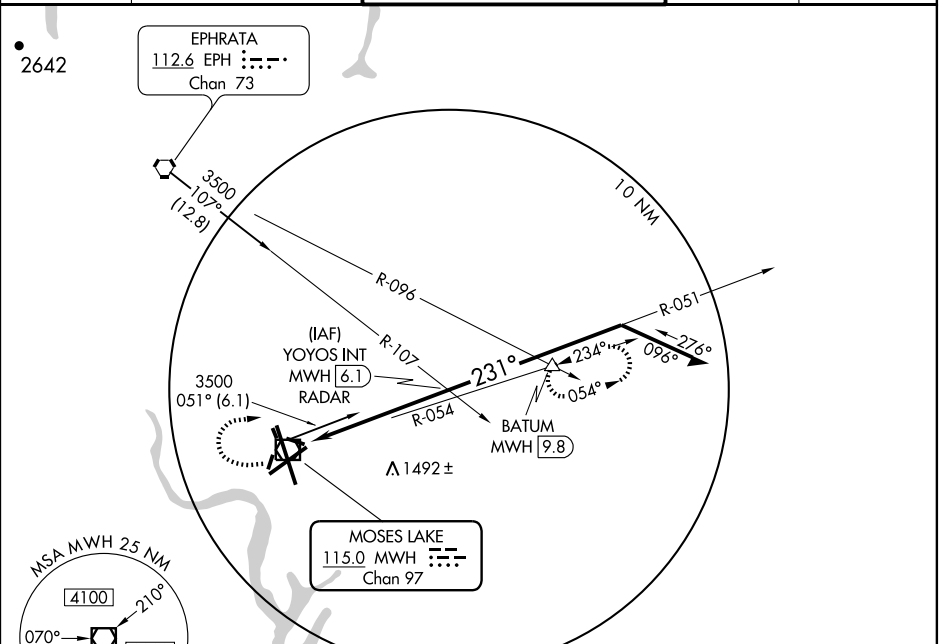
VOR/DME MWH <b>115.0</b> Chan <b>97</b>	APP CRS <b>231°</b>	Rwy Idg TDZE <b>1161</b> Apt Elev <b>1185</b>
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**VOR RWY 22**

MOSES LAKE/GRANT COUNTY INTL (MWH)

<b>V</b> <b>A</b>	MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.			
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ATIS <b>119.05</b>	GRANT COUNTY APP CON * <b>126.4 379.95</b>	GRANT COUNTY TOWER * <b>118.25 (CTAF) 128.0 257.8</b>	GND CON <b>121.9</b>	UNICOM <b>122.95</b>
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VOR/DME MWH  
**115.0**  
Chan **97**

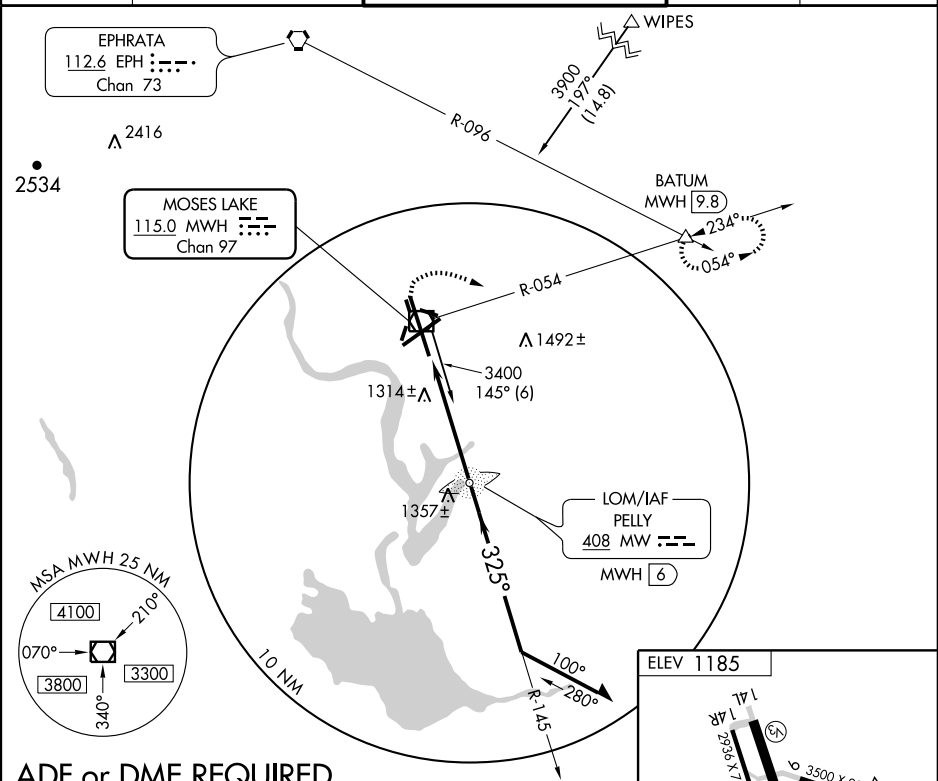
APP CRS  
**325°**

Rwy Idg **13503**  
TDZE **1164**  
Apt Elev **1185**

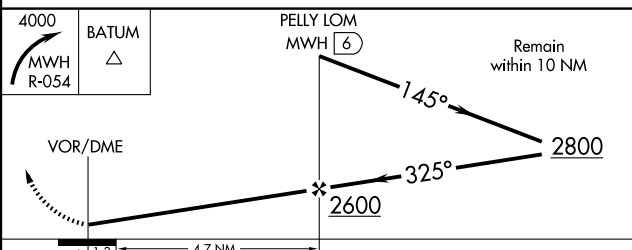
# VOR RWY 32R

MOSES LAKE/GRANT COUNTY INTL (MWH)

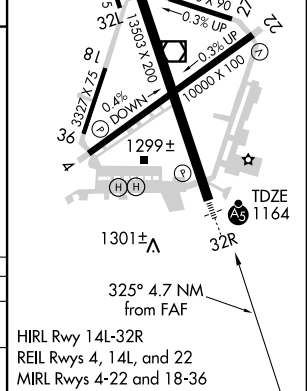
<p><b>V</b> <b>A</b></p>		<p>MALSR </p>	<p>MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.</p>	
<p>ATIS <b>119.05</b></p>	<p>GRANT COUNTY APP CON * <b>126.4 379.95</b></p>	<p>GRANT COUNTY TOWER * <b>118.25 (CTAF) 128.0 257.8</b></p>	<p>GND CON <b>121.9</b></p>	<p>UNICOM <b>122.95</b></p>



## ADF or DME REQUIRED



CATEGORY	A	B	C	D
S-32R	1620/24 456 (500-½)		1620/40 456 (500-¾)	1620/50 456 (500-1)
CIRCLING	1680-1 495 (500-1)		1680-1½ 495 (500-1½)	1740-2 555 (600-2)



## AIRPORT DIAGRAM

AFD-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

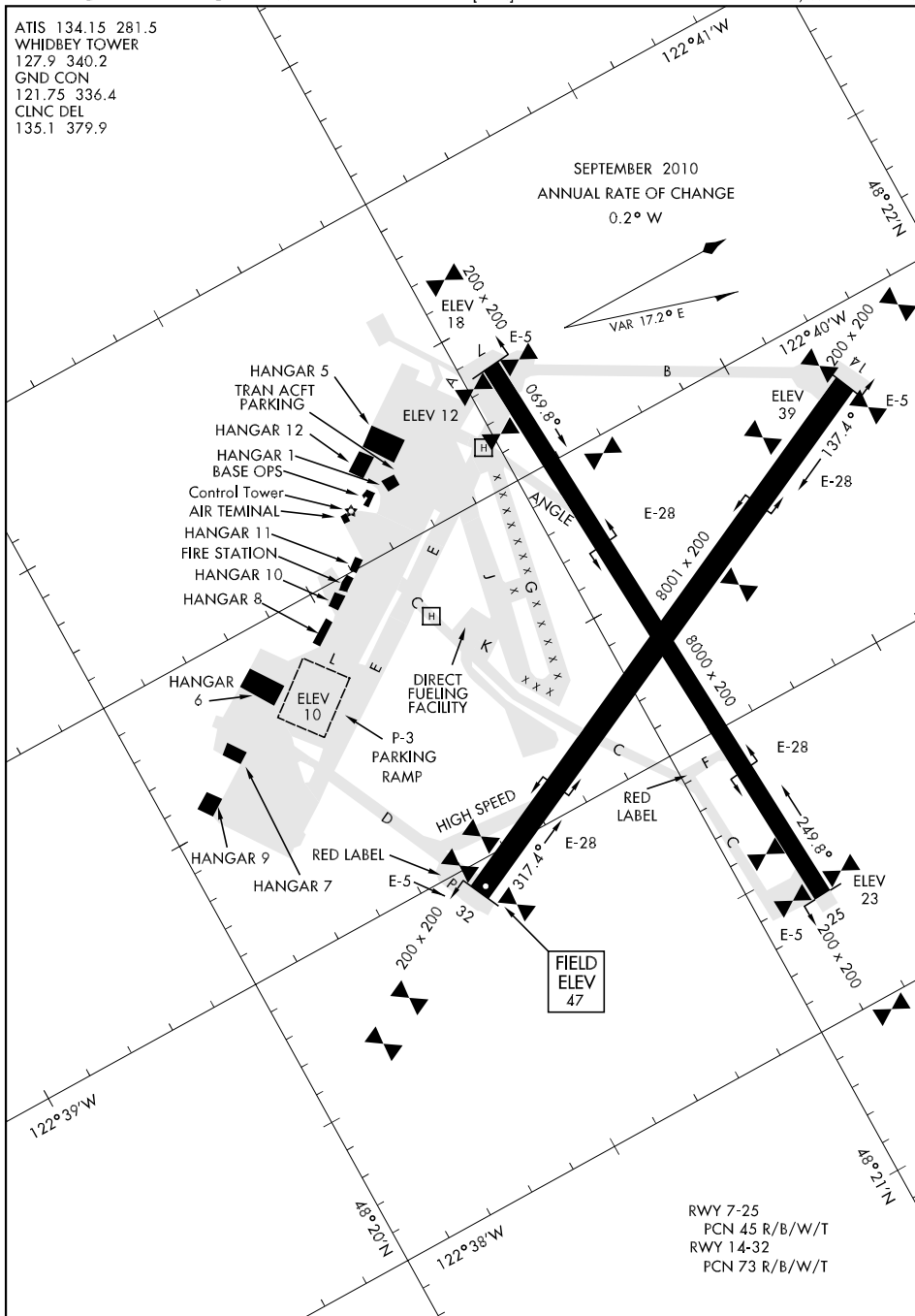
OAK HARBOR, WASHINGTON

ATIS 134.15 281.5  
 WHIDBEY TOWER  
 127.9 340.2  
 GND CON  
 121.75 336.4  
 CLNC DEL  
 135.1 379.9

SEPTEMBER 2010  
 ANNUAL RATE OF CHANGE  
 0.2° W

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010



## AIRPORT DIAGRAM

OAK HARBOR, WASHINGTON

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)



**WHIDBEY ISLAND NAS** (AULT FLD) (NUW) (KNUW) N 3 N UTC-8(-7DT)

N48°21.11' W122°39.36'

SEATTLE

H-1B, L-1E

DIAP, AD

47 B TPA—See Remarks NOTAM FILE NUW Not insp.

RWY 14-32: H8001X200 (CONC) PCN 73 R/B/W/T HIRL CL

RWY 14: ALSF1. OLS. TDZL. REIL. RWY 32: ALSF1. OLS. TDZL. REIL.

RWY 07-25: H8000X200 (CONC) PCN 45 R/B/W/T HIRL

RWY 07: OLS. REIL. RWY 25: ALSF1. REIL. OLS.

**ARRESTING GEAR/SYSTEM**

RWY 14 ← HOOK E5 (15' OVRN) HOOK E28(B) (1420') HOOK E28(B) (1926') HOOK E5 (14' OVRN →) RWY 32

RWY 07 ← HOOK E5 (15' OVRN) HOOK E28(B) (2425') HOOK E28(B) (1930') HOOK E5 (15' OVRN →) RWY 25

**MILITARY SERVICE: A-GEAR** E5 RATINGS—07-355 HEAVY WEIGHT (DRY), 25-335 HEAVY WEIGHT (DRY), 14-620

HEAVY WEIGHT (DRY), 32-595 HEAVY WEIGHT (DRY). JASU 1(NC-8A/A1) 1(NC-10C) 1(GTC-85/GTE-85)

1(NCPP-105/RCPT-105) FUEL J8, J5 FLUID SP PRESEAIR De-ice LHOX LOX OIL O-156 SOAP

**TRAN ALERT** Transient crews must be ready to provide technical direction/assistance in svc/maintenance. Ltd svc/maintenance avbl Mon-Fri 1500-2300Z, no maintenance Sat, Sun and holidays. Air terminal opr 1400-0200Z, as rqr other times.**MILITARY REMARKS:** See FLIP AP/1 Supplementary Arpt Information. RSTD PPR for all acft except Search and Rescue/Medevac ctc Air Terminal Supervisor, 1430-0100Z at DSN 820-2604/6707, C360-257-2604/6707.Prior coordination/fit advisory rqr for AMC/JOSAC/NALO missions. **CAUTION** All E5 overrun A-Gear rigged at all times, accidental engagement in the wrong direction will result in acft damage and may result in injury or loss of life. Bird hazard, See FLIP AP/1 Supplementary Arpt Remark. **TFC PAT** TPA—Overhead initial 3000(2953),

overhead break 1500(1453) day, 1700(1653) night, pattern alt 1000(953) day, 1200(1153) night. Reduced rwy

separation standard in effect USN/USMC acft. UHF equipped acft use UHF twr frequency. **CSTMS/AG/IMG** Avbl only

for Whidbey based military acft from Canada, 48 hr prior notice, ctc OPS Duty Officer DSN 820-2681/2682,

C360-257-2681/2682. Base OPS DSN 820-2884/2885, C360-257-2884-2885. **MISC** Precision Approach

and Landing Systems Data Link frequency 313.3, TRN-28 Chan 18.

**COMMUNICATIONS:** ATIS 134.15 281.5① **APP/DEP CON** 118.2 285.65 (West) 120.7 270.8 (East)**TOWER** 127.9 340.2 **GND CON** 121.75 336.4 **CLNC DEL** 124.15 135.1 379.9**PRE TAXI CLNC** 124.15 135.1 380.0**PMSV METRO** 343.4 **BASE OPS** 350.1**AIRSPACE: CLASS C** svc ctc **APP CON**.**RADIO AIDS TO NAVIGATION:** NOTAM FILE NUW.(H) **TACAN** NUW (113.8) Chan 85 N48°21.30' W122°39.71' at fld. 51/18E. **TACAN** unusable 133°-163°  
byd 30 NM blo 4,000'.**ILS** 110.1 I-NUW Rwy 14. Unusable byd 3° W of course and byd 5° E of course due to lack of defined  
glide path and clearance above path. **GS** unusable byd 5° left and 3° right of course.**ASR/PAR****COMM/NAV/WEATHER REMARKS:** VFR advisory svc ctc **APP CON**. Pre-taxi clnc 135.1 used for pre taxi clnc at NUW,  
124.15 on gnd clnc del at CLM—Port Angeles. Radar see Terminal FLIP for Radar Minima.**WILBUR** (2S8) 2 SW UTC-8(-7DT) N47°45.20' W118°44.64'

SEATTLE

L-13A

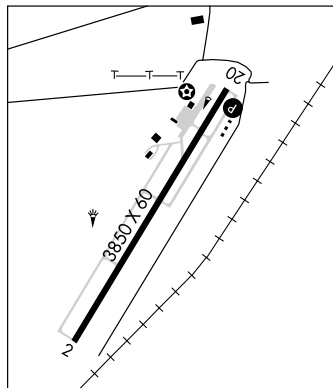
2183 B FUEL 100LL, JET A NOTAM FILE SEA

RWY 02-20: H3850X60 (ASPH) S-155 MIRL

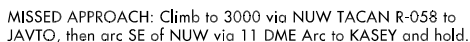
RWY 02: REIL. RWY 20: REIL. PAPI(P2L)—GA 3.0° TCH 40'.

**AIRPORT REMARKS:** Attended Mon-Fri 1600-0100Z. **ACTIVATE** MIRLRwy 02-20 and REIL Rwy 02 and Rwy 20 and PAPI Rwy 20 and  
rotating bcn—CTAF.**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE EPH.**EPHRATA (H) VORTACW** 112.6 EPH Chan 73 N47°22.68'

W119°25.44' 030° 35.7 NM to fld. 1250/21E.



WHIDBEY ISLAND NAS (AULT FLD) (KNUW)



ACD/DAD

[illegible]

EMERG SAFE ALT 100 NM 16,500

KAMLE R-238  
3000  
058°  
1800  
Koyed  
1300  
Jogip  
TACAN  
4.7 NM  
295°  
TCH 55

NUW R-058	NUW 11	Arc 11
-----------	--------	--------

ELEV 47

TDZE 25

058° to TACAN

TWR 167

8001 x 200

200

A1

A1

A1

32

REIL Rwy 7-25, 14-32  
 TDZ/CL Rwy 14-32  
 HIRL Rwy 7-25, 14-32

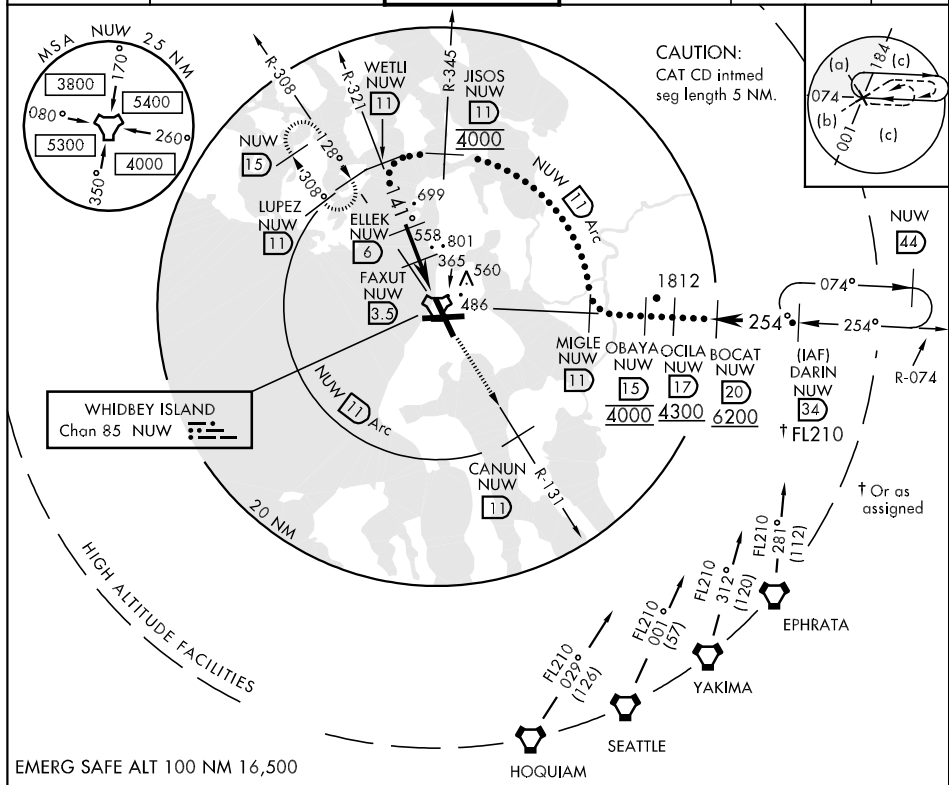
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

HI-TACAN RWY 7

HI-TACAN RWY 14

HI-TACAN RWY 14

TACAN NUW Chan 85	APCH CRS 141°	Rwy Idg 8001 TDZE 39 Arpt Elev 47	JAL-451 [USN]	WHIDBEY ISLAND NAS (AULT FLD) (KNUW)		
<div><div></div><div></div><div></div></div> <div>* When ALS inop, increase CAT CD vis to 1½ miles, CAT E to 1¾ miles.</div>			ALS-F-1 <div><div>A1</div><div></div></div>	MISSED APPROACH: Climb to 4000 via NUW TACAN R-131 to CANUN, then arc SW of NUW TACAN via 11 DME Arc to LUPEZ and hold.		
ATIS 134.15 281.5	WHIDBEY APP CON 120.7 270.8 118.2 285.65 EAST WEST	WHIDBEY TOWER 127.9 340.2	GND CON 121.75 336.4	CLNC DEL 135.1 379.9	ASR/PAR	



WETLI R-321  
111.7

3000  
141°  
1800  
1020

ELLEK 6

FAXUT 3.5

JOVPO 1.8

TACAN 0.8

2.87°  
TCH 55

2.5 NM

2.7 NM

4000  
NUW R-131

CANUN  
NUW 11

NUW  
Arc 11

ELEV 47

141° to TACAN

TDZE 39

8000 x 200

25

32

TWR 167

REIL Rwy 7-25, 14-32  
TDZ/CL Rwy 14-32  
HRL Rwy 7-25, 14-32

CATEGORY	C	D	E
S-14 *	560-1	521 (600-1)	560-1¼ 521 (600-1¼)
CIRCLING	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)	1120-3 1073 (1100-3)

48°21'N-122°39'W WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

HI-TACAN RWY 14

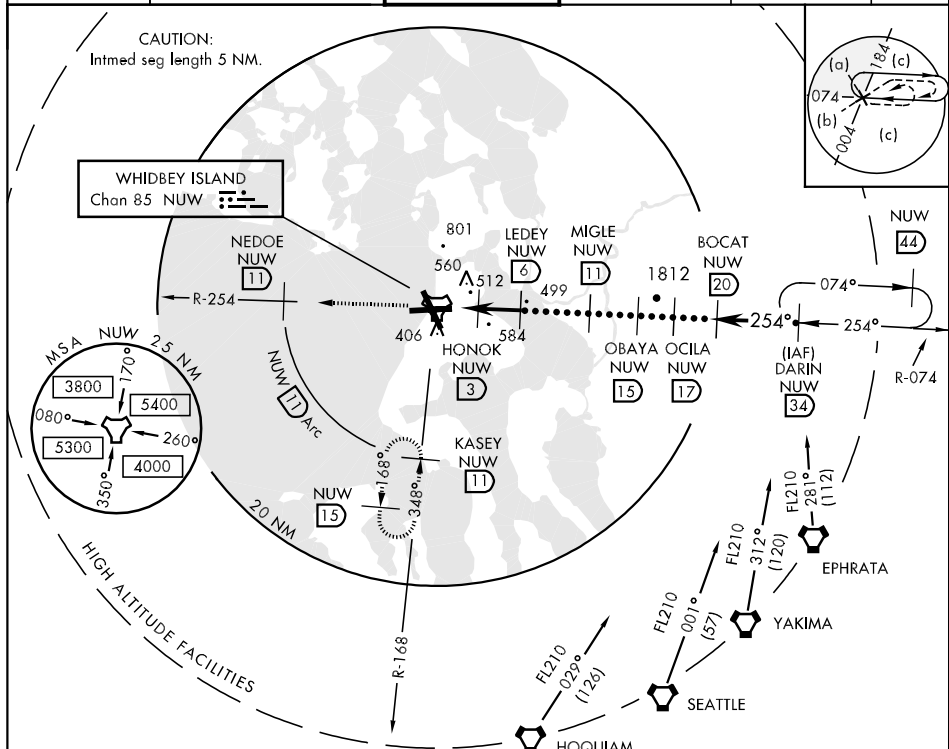
NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

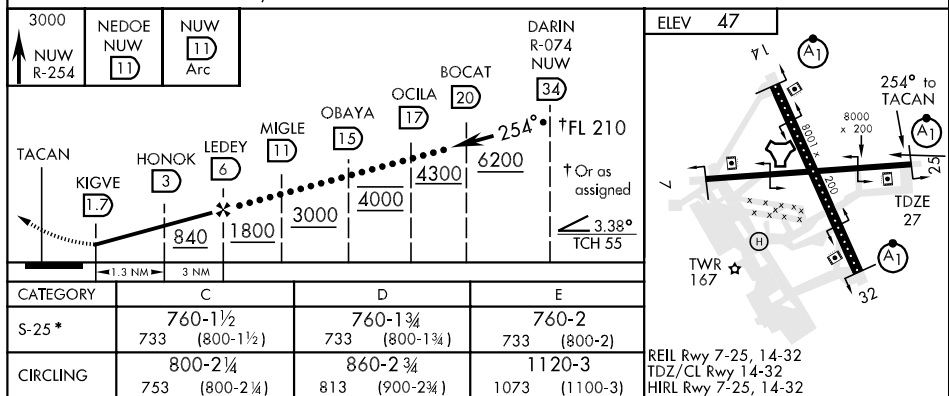
HI-TACAN RWY 25

HI-TACAN RWY 23

TACAN NUW Chan 85	APCH CRS 254°	Rwy Idg 8000 TDZE 27 Arpt Elev 47	JAL-451 [USN]	WHIDBEY ISLAND NAS (AULT FLD) (KNUW)			
<div><div><div></div><div></div></div><div><div></div><div></div></div></div> <p>* When ALS inop, increase CAT C vis to 2 miles, CAT D to 2 ¼ miles, CAT E to 2 ½ miles.</p>			<div><div>ALSF-1</div><div><div>A1</div><div></div></div></div>		MISSED APPROACH: Climb to 3000 via NUW TACAN R-254 to NEDOE, then arc SW of NUW via 11 DME arc to KASEY and hold.		
ATIS 134.15 281.5	WHIDBEY APP CON 120.7 270.8 EAST 118.2 285.65 WEST		WHIDBEY TOWER 127.9 340.2		GND CON 121.75 336.4	CLNC DEL 135.1 379.9	ASR/PAR



EMERG SAFE ALT 100 NM 16,500



WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

Amdt 1 10210

# HI-TACAN RWY 25

TACAN NUW Chan 85	APCH CRS 311°	Rwy ldg TDZE 47 Arpt Elev 47
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JAL-451 [USN]

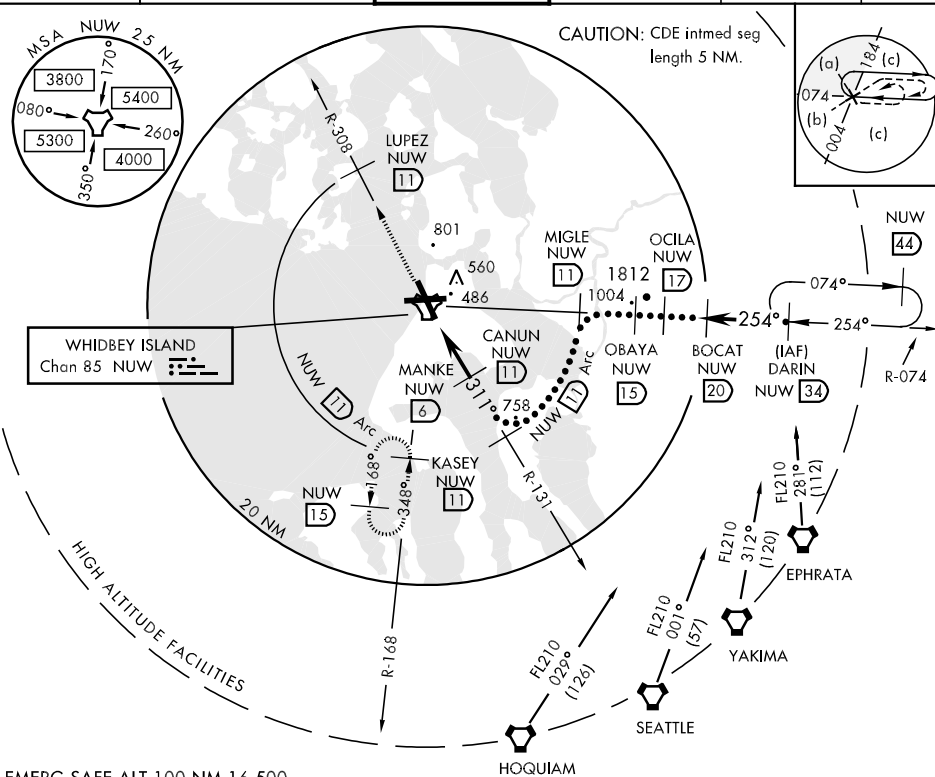
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

▲ \* When ALS inop, increase CAT C vis to 1¾ miles,  
CAT D to 2 miles, CAT E to 2¼ miles.



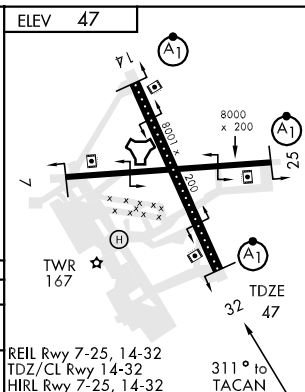
MISSED APPROACH: Climb to 3000 via NUW TACAN  
R-308 to LUPEZ, then arc W of NUW via 11 DME Arc to  
KASEY and hold.

ATIS 134.15 281.5	WHIDBEY APP CON 120.7 270.8 EAST 118.2 285.65 WEST	WHIDBEY TOWER 127.9 340.2	GND CON 121.75 336.4	CLNC DEL 135.1 379.9	ASR/PAR
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EMERG SAFE ALT 100 NM 16,500

3000 NUW R-308	LUPEZ NUW 11	NUW 11 Arc	DARIN R-074 NUW 34
TACAN	NAVOE 1.3	MANKE 6	MIGLE R-131 11
			BOCAT 20
			OCILA 17
			FL 210
			Or as assigned
			3.17° TCH 55
			4.2 NM
CATEGORY	C	D	E
S-32*	660-1¼ 613 (700-1¼)	660-1½ 613 (700-1½)	660-1¾ 613 (700-1¾)
CIRCLING	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)	1120-3 1073 (1100-3)



LOC I-NUW <b>110.1</b>	APCH CRS <b>137°</b>	Rwy Idg TDZE <b>39</b> Arpt Elev <b>47</b>
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AL-451 [USN]

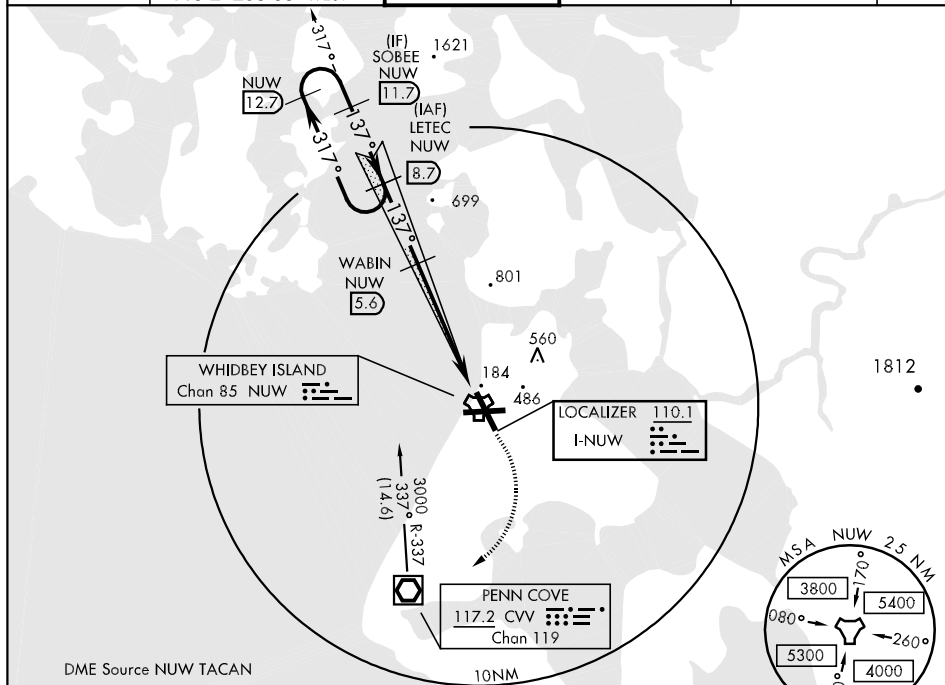
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

▼ \* When ALS inop, increase CAT ABCDE vis to ¾ mile.  
 \*\* When ALS inop, increase CAT ABC vis to 1 mile,  
 CAT DE to 1¼ miles.



MISSED APPROACH: Climb to 2000 via hdg 137°, then  
 climbing right turn to 3000, direct CVV VOR/DME, then  
 via CVV R-337 to LETEC and hold.

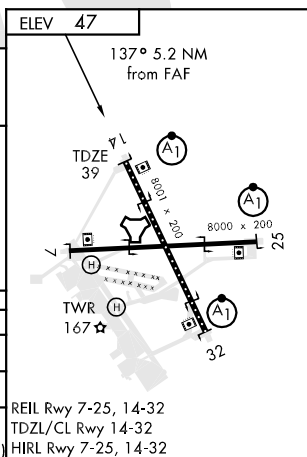
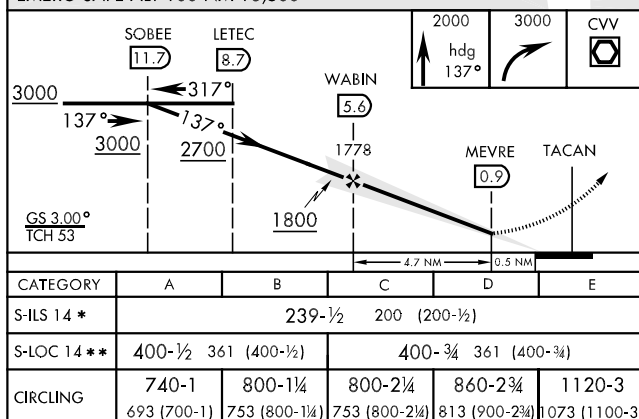
ATIS <b>134.15 281.5</b>	WHIDBEY APP CON <b>120.7 270.8</b> EAST <b>118.2 285.65</b> WEST	WHIDBEY TOWER <b>127.9 340.2</b>	GND CON <b>121.75 336.4</b>	CLNC DEL <b>135.1 379.9</b>	ASR/PAR
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DME Source NUW TACAN

## DME REQUIRED

EMERG SAFE ALT 100 NM 16,500



## PENN COVE TWO DEPARTURE (CVV2.CVV)

OAK HARBOR, WASHINGTON

ATIS 134.15 281.5  
 CLNC DEL  
 135.1 379.9  
 GND CON  
 121.75 336.4  
 WHIDBEY TOWER  
 127.9 340.2  
 WHIDBEY DEP CON  
 120.7 270.8 EAST  
 118.2 285.65 WEST

JAL-451 [USN]

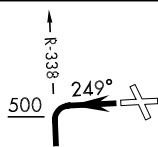
Rwy	Knots	60	120	180	240
25	ⓐ	V/V(fpm)	230	460	690
25	ⓑ	V/V(fpm)	270	540	810
			1080		

ATC Climb Rate

ⓐ to 2000

ⓑ DIGGN transition only to 7000

PENN COVE  
 117.2 CVV  
 Chan 119



2000

R-166

(81)

66°

2337

925  
 Δ  
 DIGGN  
 L-1

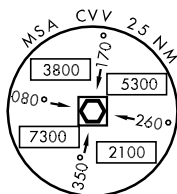
7000

(27)

118°

PAINE  
 110.6 PAE  
 Chan 43  
 L-1, H-1

3000



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 25: Climb to 500 feet on heading 249°. Then climbing left turn to intercept CVV VOR/DME R-338 to CVV. Cross CVV at or above 2000 feet. Thence....

....Via assigned transition or fly heading 158° and expect vectors to join assigned route.

DIGGN TRANSITION (CVV2.DIGGN): Via CVV R-166 to DIGGN, cross DIGGN at or above 7000 feet.

PAINE TRANSITION (CVV2.PAE): Via CVV R-118 to PAE VOR/DME. Cross PAE VOR/DME at or above 3000 feet.

WAAS  
Chan **50004**  
**W14A**APCH CRS  
**137°**Rwy Idg **8001**  
TDZE **39**  
Arpt Elev **47**

AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

▼ \* When ALS inop, increase CAT ABCD vis to  $\frac{3}{4}$  mile.\*\* When ALS inop, increase CAT AB vis to 1 mile,  
CAT C to  $1\frac{1}{4}$  miles, CAT D to  $1\frac{1}{2}$  miles.MISSED APPROACH: Climb to 2000, then climbing  
right turn to 3500 direct SOBEE and hold.ATIS  
**134.15 281.5**WHIDBEY APP CON  
**120.7 270.8** EAST  
**118.2 285.65** WESTWHIDBEY TOWER  
**127.9 340.2**GND CON  
**121.75 336.4**CLNC DEL  
**135.1 379.9**

ASR/PAR

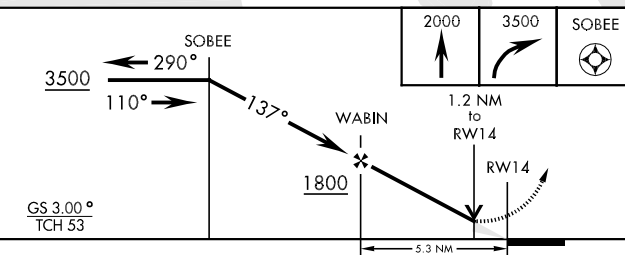
\*\*\* When ALS inop, increase CAT ABCD vis to  $1\frac{3}{4}$  miles.For uncompensated Baro-VNAV systems, LNAV/VNAV  
NA below -15°C(5°F) or above 39°C(102°F)  
DME/DME RNP-0.3 NA.

Max speed from SOBEE to WABIN 240 KIAS

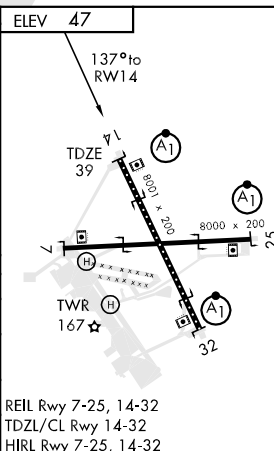
4338



EMERG SAFE ALT 100 NM 16,500



CATEGORY	A	B	C	D
LPV DA *	239- $\frac{1}{2}$		200	(200- $\frac{1}{2}$ )
LNAV MDA **	480- $\frac{1}{2}$	441 (500- $\frac{1}{2}$ )	480- $\frac{3}{4}$	480-1
			441 (500- $\frac{3}{4}$ )	441 (500-1)
LNAV/VNAV DA ***	529- $1\frac{1}{4}$		490	(500- $1\frac{1}{4}$ )
CIRCLING	740- $1\frac{3}{4}$	800- $1\frac{3}{4}$	800- $2\frac{1}{4}$	860- $2\frac{3}{4}$
	693 (700- $1\frac{3}{4}$ )	753 (800- $1\frac{3}{4}$ )	753 (800- $2\frac{1}{4}$ )	813 (900- $2\frac{3}{4}$ )

REIL Rwy 7-25, 14-32  
TDZL/CL Rwy 14-32  
HIRL Rwy 7-25, 14-32



WAAS Chan <b>44487</b> <b>W25A</b>	APCH CRS <b>249°</b>	Rwy Idg <b>8000</b> TDZE <b>27</b> Arpt Elev <b>47</b>
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AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

**▽** \* When ALS inop, increase CAT ABCD vis to ¾ mile.

\*\* When ALS inop, increase CAT AB vis to 1 mile,  
CAT C to 1½ miles, CAT D to 1¾ miles.



MISSED APPROACH: Climb to 2000, then climbing left  
turn to 3000 direct KASEY and hold.

ATIS <b>134.15 281.5</b>
-----------------------------

WHIDBEY APP CON <b>120.7 270.8</b> EAST <b>118.2 285.65</b> WEST
--

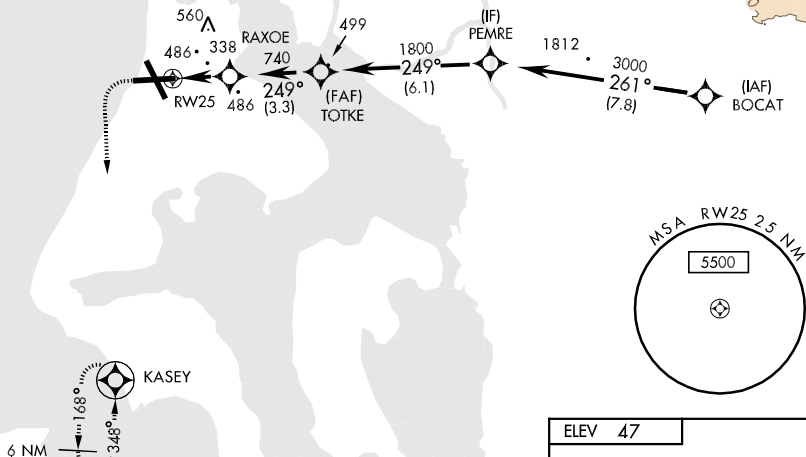
WHIDBEY TOWER <b>127.9 340.2</b>
-------------------------------------

GND CON <b>121.75 336.4</b>
--------------------------------

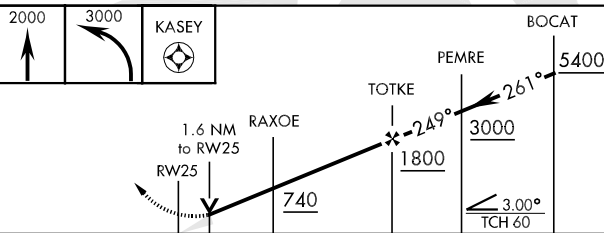
CLNC DEL <b>135.1 379.9</b>
--------------------------------

ASR/PAR
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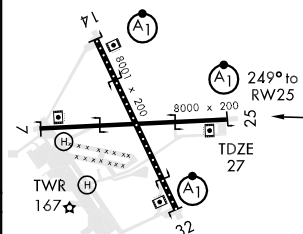
DME/DME RNP-0.3 NA.



EMERG SAFE ALT 100 NM 16,500



ELEV 47



CATEGORY	A	B	C	D
LPV DA *	228-½		201	(200-½)
LNAV MDA **	600-½ 573 (600-½)		600-1	600-1¼
			573 (600-1)	573 (600-1¼)
CIRCLING	740-1	800-1¼	800-2¼	860-2¾
	693 (700-1)	753 (800-1¼)	753 (800-2¼)	813 (900-2¾)

REIL Rwy 7-25, 14-32  
TDZL/CL Rwy 14-32  
HIRL Rwy 7-25, 14-32

TACAN NUW Chan 85	APCH CRS 058°	Rwy Idg 8000 TDZE 25 Arpt Elev 47
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AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)



MISSED APPROACH: Climb to 3000 via NUW TACAN R-058 to JAVTO, then arc SE of NUW via 11 DME Arc to KASEY and hold.

ATIS 134.15 281.5
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WHIDBEY APP CON 120.7 270.8 EAST 118.2 285.65 WEST
--

WHIDBEY TOWER 127.9 340.2
------------------------------

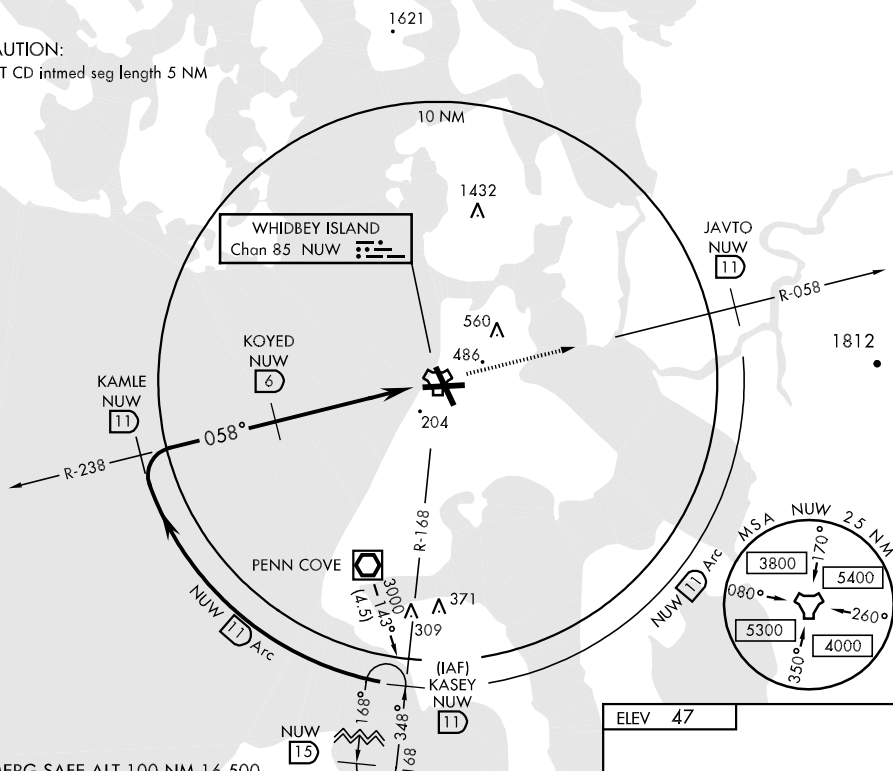
GND CON 121.75 336.4
-------------------------

CLNC DEL 135.1 379.9
-------------------------

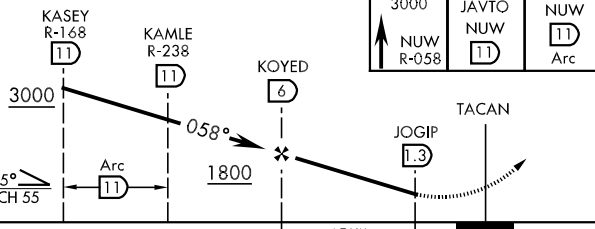
ASR/PAR

CAUTION:

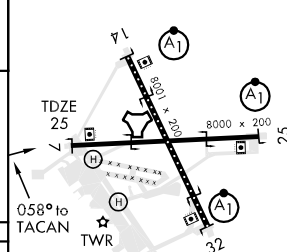
CAT CD intmed seg length 5 NM



EMERG SAFE ALT 100 NM 16,500



ELEV 47



CATEGORY	A	B	C	D
S-7	460-1 435 (500-1)	460-1 435 (500-1)	460-1 435 (500-1)	460-1 435 (500-1)
CIRCLING	740-1 693 (700-1)	800-1 753 (800-1)	800-2 753 (800-2)	860-2 813 (900-2)

REIL Rwy 7-25, 14-32  
TDZL/CL Rwy 14-32  
HIRL Rwy 7-25, 14-32

TACAN NUW	APCH CRS	Rwy Idg	8001
Chan 85	141°	TDZE	39
		Arpt Elev	47

AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

**T** \*When ALS inop, increase CAT AB vis to 1 mile, CAT C to 1½ miles, CAT D to 1¾ miles.

ALSF-1

**MISSED APPROACH:** Climb to 4000 via NUW TACAN R-131 to CANUN, then arc SW of NUW via 11 DME Arc to LUPEZ and hold.

ATIS  
134.15 281.5

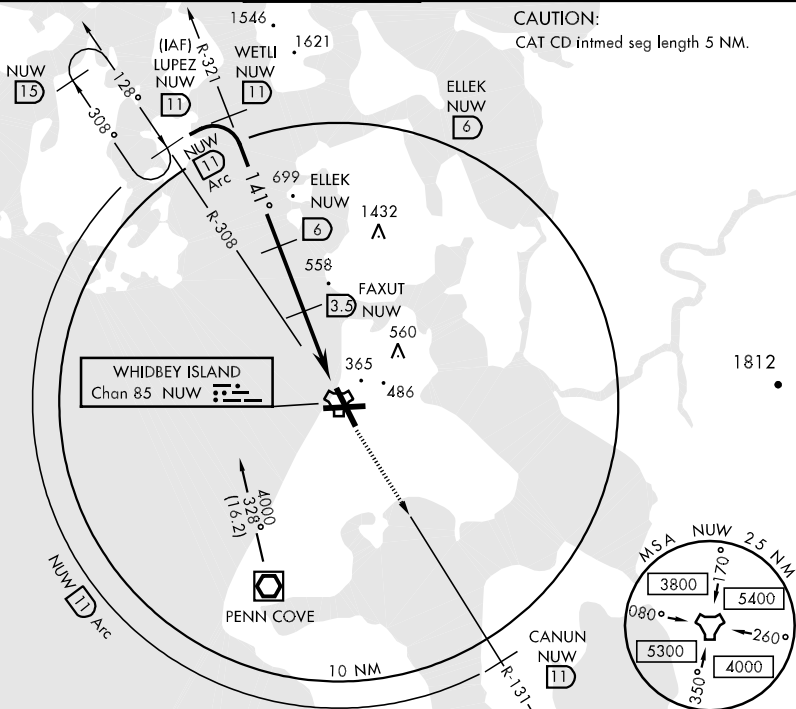
WHIDBEY APP CON		
120.7	270.8	EAST
118.2	285.65	WEST

WHIDBEY TOWER  
127.9 340.2

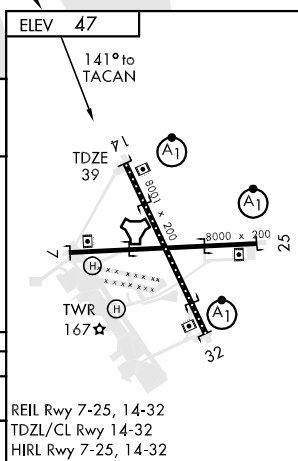
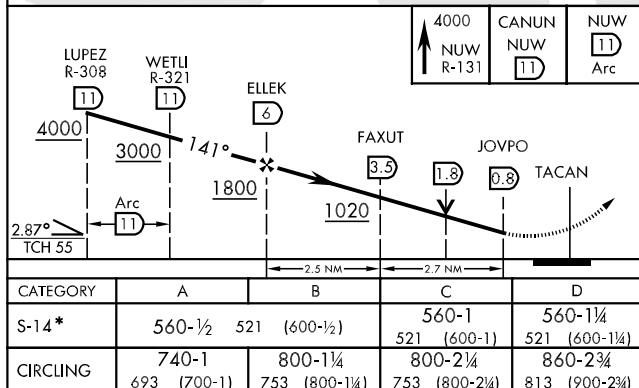
GND CON  
121.75 336.4

CLNC DEL  
135.1 379

ASR/PAR



EMERG SAFE ALT 100 NM 16.500



OAK HARBOR, WASHINGTON

48°21'N-122°39'W

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

Amdt 1 10210

TACAN RWY 14

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

TACAN NUW Chan 85	APCH CRS 254°	Rwy Idg 8000 TDZE 27 Arpt Elev 47
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AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)



\* When ALS inop, increase CAT AB vis to 1 mile, CAT C to 2 miles, CAT D to 2 1/4 miles.



MISSED APPROACH: Climb to 3000 via NUW TACAN R-254 to NEDOE, then arc SW of NUW via 11 DME Arc to KASEY and hold.

ATIS 134.15 281.5
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WHIDBEY APP CON 120.7 270.8 EAST 118.2 285.65 WEST
--

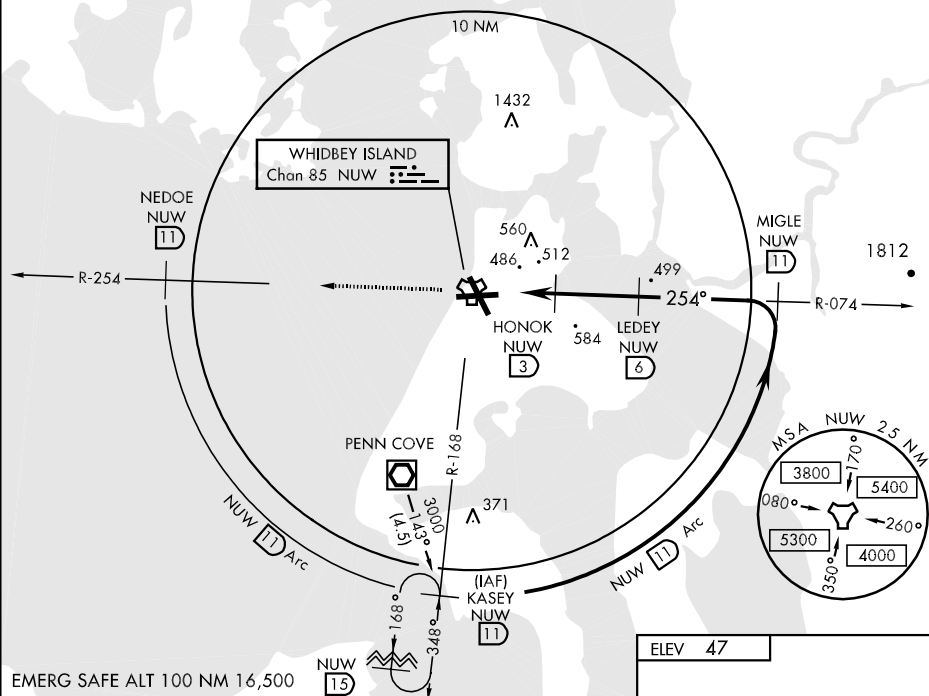
WHIDBEY TOWER 127.9 340.2
------------------------------

GND CON 121.75 336.4
-------------------------

CLNC DEL 135.1 379.9
-------------------------

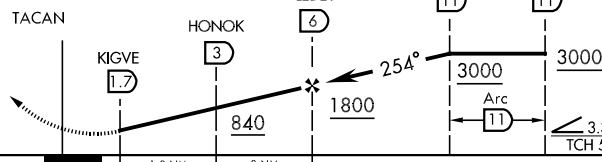
ASR/PAR

CAUTION: CAT CD intmed  
seg length 5 NM.



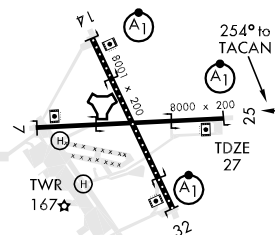
EMERG SAFE ALT 100 NM 16,500

3000 NUW R-254	NEDOE NUW 11	NUW Arc
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CATEGORY	A		B		C	D
S-25 *	760-1/2	733 (800-1/2)	760-1 1/2	733 (800-1 1/2)	760-1 3/4	733 (800-1 3/4)
CIRCLING	760-1	800-1 1/4	800-2 1/4	860-2 3/4	860-2 3/4	813 (900-2 3/4)
	713 (800-1)	753 (800-1 1/4)	753 (800-2 1/4)	813 (900-2 3/4)		

ELEV 47



REIL Rwy 7-25, 14-32  
TDZL/CL Rwy 14-32  
HIRL Rwy 7-25, 14-32

TACAN NUW Chan <b>85</b>	APCH CRS <b>311°</b>	Rwy Idg <b>8001</b> TDZE <b>47</b> Arpt Elev <b>47</b>
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AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

**T** \* When ALS inop, increase CAT AB vis to 1 mile, CAT C to 1¾ miles, CAT D to 2 miles.

ALSF-1

MISSED APPROACH: Climb to 3000 via NUW TACAN R-308 to LUPEZ, then Arc SW of NUW via 11 DME Arc to KASEY and hold.

ATIS  
134.15 281.5

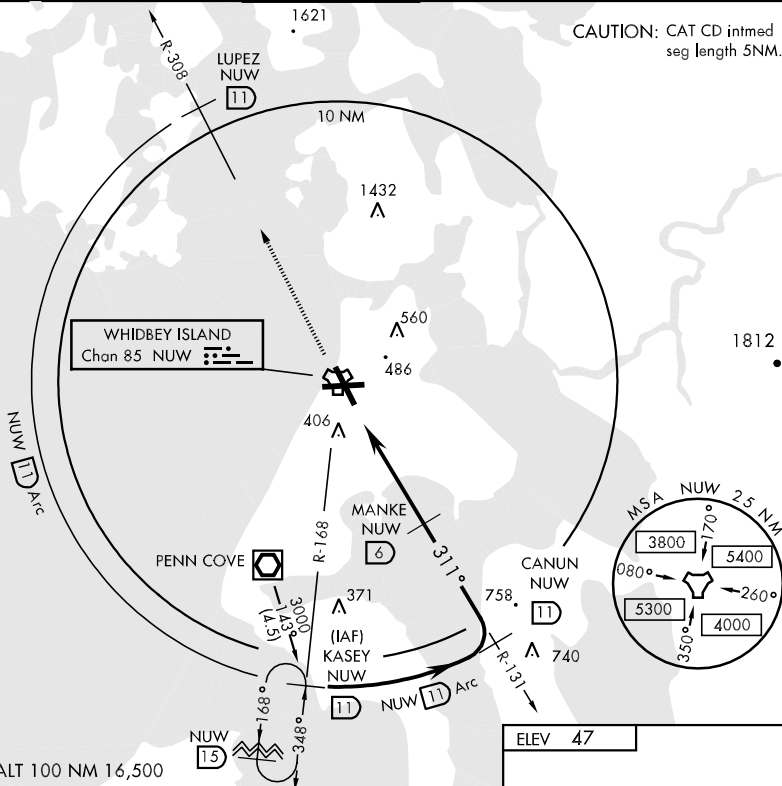
WHIDBEY APP CON  
120.7 270.8 EAST  
118.2 285.65 WEST

WHIDBEY TOWER  
127.9 340.2

GND CON  
121.75 336.4

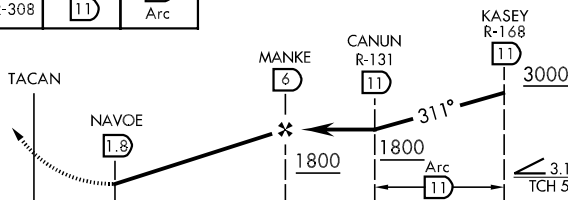
CLNC DEL  
135.1 379.9

ASR/PAR

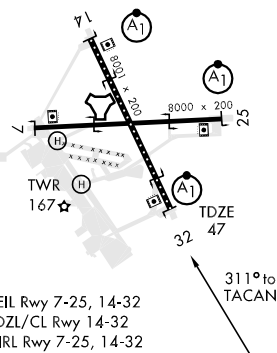


EMERG SAFE ALT 100 NM 16,500

3000 NUW R-308	LUPEZ NUW 11	NUW 11 Arc
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CATEGORY	A	B	C	D
S-32*	660-1/2 613 (700-1/2)		660-1 1/4 613 (700-1 1/4)	660-1 1/2 613 (700-1 1/2)
CIRCLING	740-1 693 (700-1)	800-1 1/4 753 (800-1 1/4)	800-2 1/4 753 (800-2 1/4)	860-2 3/4 813 (900-2 3/4)



OAK HARBOR, WASHINGTON

48° 21' N-122° 39' W

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

Amdt 1 10210

# TACAN RWY 32

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

**NOLLA** N47°37.95' W122°23.37'. NOTAM FILE BFI.  
**NDB (LOM)** 362 BF 130° 7.1 NM to Boeing Fld/King Co Intl.

SEATTLE  
L-1D

## OAK HARBOR

**AJ EISENBERG** (OKH) 3 SW UTC-8(-7DT) N48°15.09' W122°40.42'

SEATTLE  
L-1E  
IAP

193 B S2 **FUEL** 100LL, MOGAS NOTAM FILE 76S

**Rwy 07-25:** H3265X25 (ASPH) S-5 LIRL (NSTD) 1.6% up E

**Rwy 07:** PAPI(P2L)—GA 4.5°. Thld dsplcd 507'. Fence. Rgt tfc.

**Rwy 25:** PAPI(P2L)—GA 4.5°. Trees.

**AIRPORT REMARKS:** Unattended. Rwy 07-25 NSTD LIRL only W 2620' rwy lgtd. Rwy 07-25 severely cracked, spalling in some areas. PPR for Ultralights and Gliders ctc arpt manager phone 360-929-6802 or 1-866-429-2132. ACTIVATE NSTD LIRL Rwy 07-25—CTAF. PAPI Rwy 07 and Rwy 25 opr 24 hrs.

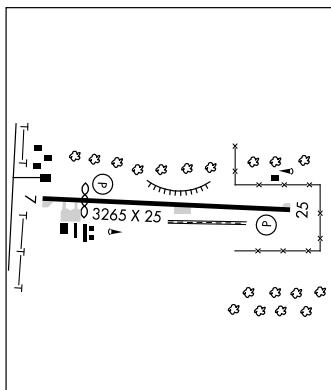
**WEATHER DATA SOURCES** AWOS-3 132.775 (360) 675-8431

**COMMUNICATIONS:** CTAF/UNICOM 122.8 ATIS 134.15 (Thru Whidbey Island NAS/Ault Fld)

Ⓡ **WHIDBEY APP/DEP CON** 118.2

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA.

**PENN COVE (L) VORW/DME** 117.2 CVV Chan 119 N48°14.68' W122°43.47' 060° 2.1 NM to fld. 200/19E.



**OCEAN SHORES** N47°00.49' W124°09.33'

**RCO** 122.4 (SEATTLE RADIO)

SEATTLE  
L-1D

**OCEAN SHORES MUNI** (W04) 2 NE UTC-8(-7DT) N46°59.95' W124°08.54'

SEATTLE  
L-1D

15 B NOTAM FILE SEA

**Rwy 15-33:** H3100X50 (ASPH) S-12.5 MIRL

**Rwy 15:** PAPI(P2L)—GA 3.0° TCH 40'.

**Rwy 33:** PAPI(P2L)—GA 3.0° TCH 40'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Unattended. Seabirds in safety and taxi areas and adjacent wetland. Rwy 15-33 has asph 50' wide with 12.5' grvl shoulders. Parking ramp loose gravel on surface. MIRL OTS indef. ACTIVATE MIRL Rwy 15-33 and PAPI Rwy 15 and Rwy 33—122.8.

**COMMUNICATIONS:** CTAF 122.9

**RCO** 122.4 (SEATTLE RADIO)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HQM.

**HQWAM (H) VORTACW** 117.7 HQM Chan 124 N46°56.82' W124°08.96' 346° 3.1 NM to fld. 10/19E. HIWAS.

**ODESSA MUNI** (43D) 1 N UTC-8(-7DT) N47°20.85' W118°40.63'

SEATTLE  
L-13A

1737 B NOTAM FILE SEA

**Rwy 02-20:** H3125X60 (ASPH) S-5 MIRL

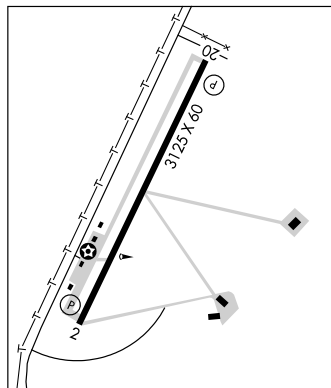
**Rwy 02:** PAPI(P2L). **Rwy 20:** PAPI(P2L). Brush.

**AIRPORT REMARKS:** Unattended. ACTIVATE MIRL Rwy 02-20 and rotating bcn—122.8.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE EPH.

**EPHRATA (H) VORTACW** 112.6 EPH Chan 73 N47°22.68' W119°25.44' 072° 30.5 NM to fld. 1250/21E.



APP CRS	Rwy Idg	<b>2758</b>
<b>071°</b>	TDZE	<b>193</b>
	Apt Elev	<b>193</b>

# RNAV (GPS) RWY 7

OAK HARBOR/AJ EISENBERG (OKH)

**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**▲** Circling north of Rwy 7-25 NA at night.  
**ASR** When local altimeter setting not received, use Whidbey Island NAS altimeter setting and increase all MDAs 40 feet.

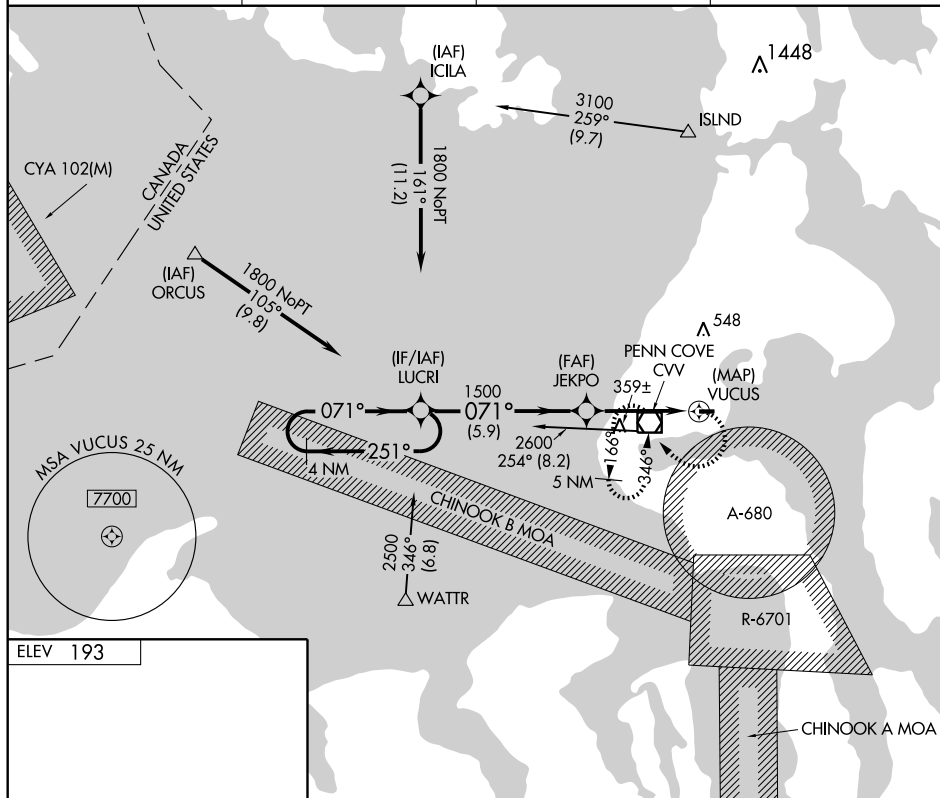
**MISSED APPROACH:** Climbing right turn to 3400  
 direct CVV VOR/DME and hold, continue  
 climb-in-hold to 3400.

AWOS-3  
**132.775**

WHIDBEY ATIS  
**134.15 281.5**

WHIDBEY APP CON  
**118.2 285.65**

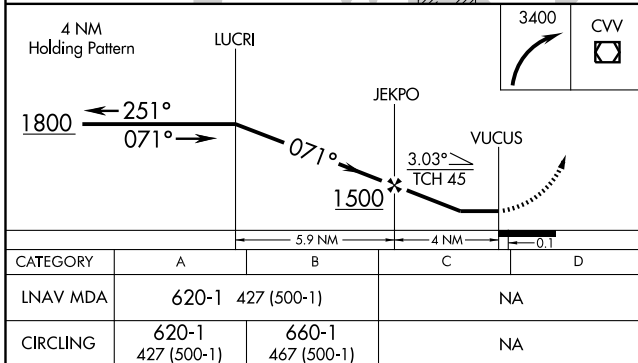
UNICOM  
**122.8 (CTAF)** **1**



ELEV **193**



LIRL Rwy 7-25 **1**



# AIRPORT DIAGRAM

AL-645 (FAA)

OLYMPIA RGNL (OLM)  
OLYMPIA, WASHINGTON

ATIS  
135.725  
OLYMPIA TOWER ★  
124.4 254.25  
GND CON  
121.6

RWY 08-26  
S-30  
RWY 17-35  
S-75, D-94, 2S-87, 2D-142

AIR CARRIER  
TERMINAL

APPROACH  
HOLD LINE

ELEV  
197

ILS  
HOLD LINE

HANGAR

FBO

TRANSIENT TIEDOWNS

MUSEUM

AIRPORT OFFICE

FBO

HANGARS

FBO

HANGARS

CONTROL  
TOWER

ELEV  
194

5501 X 150

4157 X 150

FIELD  
ELEV  
209

266.8°

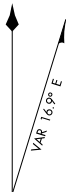
ELEV  
204

46° 58.0'N

358±

ELEV 35  
203

354.4°



JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.2° W

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

122° 54.5'W

122° 54.0'W

122° 53.5'W

# AIRPORT DIAGRAM

OLYMPIA, WASHINGTON  
OLYMPIA RGNL (OLM)

10210

NW-1, 21 OCT 2010 to 18 NOV 2010



**OKANOGAN LEGION** (S35) 1 E UTC-8(-7DT) N48°21.72' W119°34.05'

SEATTLE  
L-13A

1042 B S2 FUEL 100LL NOTAM FILE SEA

RWY 04-22: H2533X36 (ASPH) S-6 MIRL

RWY 22: Rgt tfc.

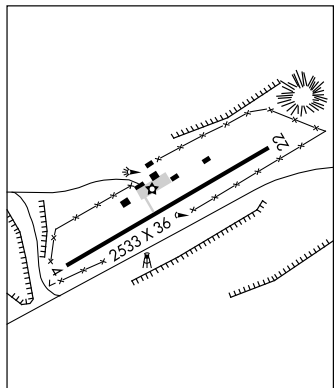
**AIRPORT REMARKS:** Unattended. Fuel by request, call 509-429-2597, 206-915-4433, 509-422-3071, 509-322-4710. ACTIVATE MIRL Rwy 04-22 CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GEG.

SPOKANE (H) VORTACW 115.5 GEG Chan 102 N47°33.90'

W117°37.61' 281° 91.7 NM to fld. 2756/21E. HIWAS.



## OLYMPIA

**HOSKINS FLD** (44T) 5 SE UTC-8(-7DT) N46°59.56' W122°49.66'

SEATTLE

213 NOTAM FILE SEA

RWY 07-25: 2015X116 (TURF)

RWY 07: Trees. RWY 25: Trees.

**AIRPORT REMARKS:** Unattended. No helicopters. No ultralights. Noise abatement procedures in effect; call arpt manager 360-491-6723. Geese and ducks on and in/ov arpt. Mole hills west end. Recommend land Rwy 07, depart 25 when wind condition permits. Rwy 07-25 no line of sight between rwy ends.

**COMMUNICATIONS:** CTAF 122.9

**OLYMPIA RGNL** (OLM) 4 S UTC-8(-7DT) N46°58.16' W122°54.15'

SEATTLE

209 B S4 FUEL 80, 100, 100LL, JET A OX 1, 3, 4 LRA NOTAM FILE OLM

H-1B, L-1D  
IAP, AD

RWY 17-35: H5501X150 (ASPH-GRVD) S-75, D-94, 2S-87, 2D-142 HIRL

RWY 17: MALSR. PAPI(P4L)—GA 3.0° TCH 54'.

RWY 35: REIL. PAPI(P4L)—GA 3.0° TCH 54'. Rgt tfc.

RWY 08-26: H4157X150 (ASPH) S-30

RWY 08: Rgt tfc. RWY 26: Tree.

**AIRPORT REMARKS:** Attended 1600-0200Z±. Twy lgts on Twy W, Twy A, Twy G, Twy L and Twy B. When twr clsd ACTIVATE HIRL Rwy 17-35, MALSR Rwy 17, PAPI Rwy 17 and Rwy 35, REIL Rwy 35, twy lgts and directional signage—CTAF. Landing fee.

**WEATHER DATA SOURCES:** ASOS 135.725 (360) 943-1278. HIWAS 113.4 OLM.

**COMMUNICATIONS:** CTAF 124.4 ATIS 135.725 UNICOM 122.95

Ⓡ SEATTLE APP/DEP CON 121.1

TOWER 124.4 (1600-0400Z±) GND CON 121.6

**AIRSPACE:** CLASS D svc 1600-0400Z± other times CLASS E.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLM.

(H) VORTACW 113.4 OLM Chan 81 N46°58.30'

W122°54.11' at fld. 200/19E. HIWAS.

DME unusable:

223°-258° byd 20 NM blo 4,100'

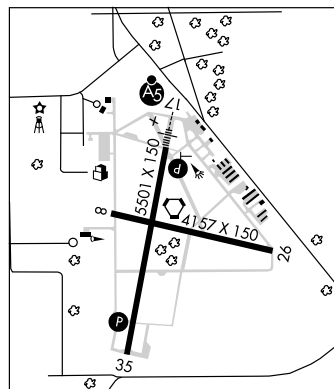
258°-283° byd 30 NM blo 4,100'

358°-043° byd 10 NM blo 6,000'

358°-043° byd 20 NM blo 7,000'

ILS 111.9 I-OLM Rwy 17. Unmonitored during hours twr closed. LOC unusable byd 25° right of course.

**COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.



LOC I-OLM <b>111.9</b>	APP CRS <b>172°</b>	Rwy Idg TDZE Apt Elev	<b>5501</b> <b>207</b> <b>209</b>
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# ILS or LOC RWY 17

OLYMPIA RGNL (OLM)

**⚠** DME or RADAR required. When local altimeter setting not received, use Sanderson Field altimeter setting and increase all DA 53 feet and all MDA 60 feet, and increase circling Cats C and D visibility ¼ mile. For inoperative MALSR, when using Sanderson Field altimeter setting, increase S-ILS 17 all Cats visibility to 1 mile.

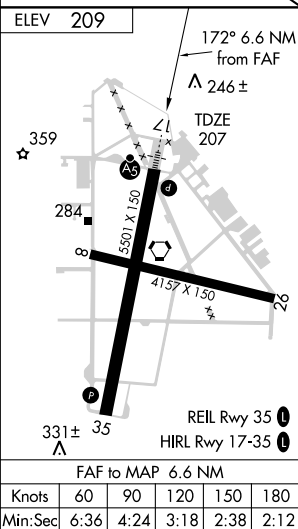
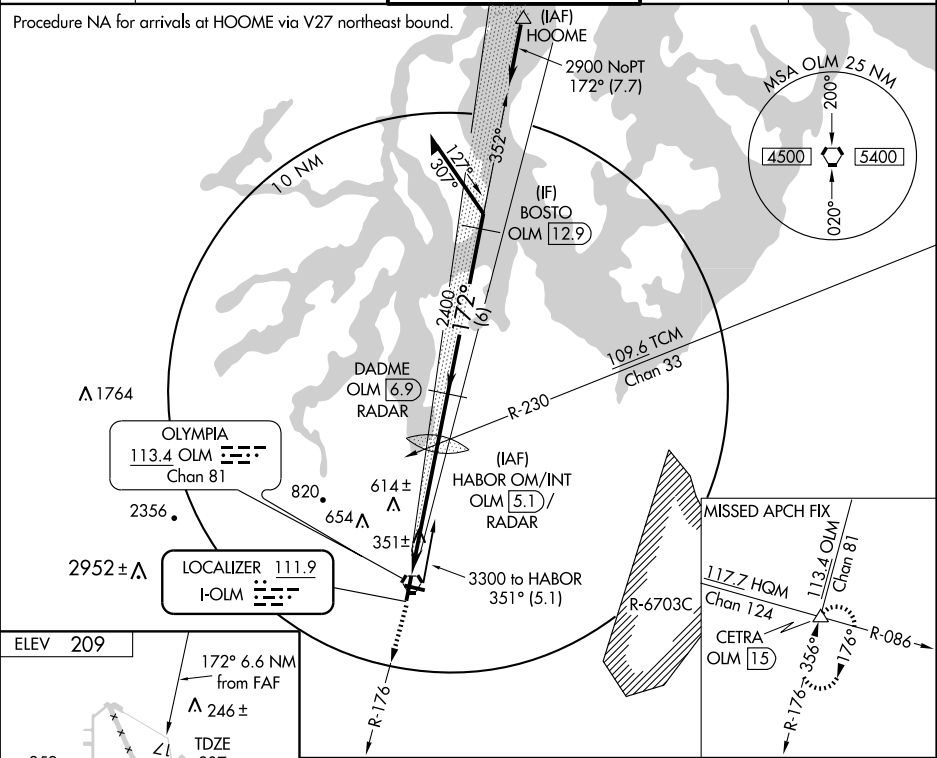
MALSR



**MISSED APPROACH:** Climb to 1400, then continue climb to 5500 via OLM VORTAC R-176 to CETRA INT/OLM VORTAC 1.5 DME and hold, continue climb-in-hold to 5500.

ATIS <b>135.725</b>	SEATTLE APP CON <b>121.1 290.9</b>	OLYMPIA TOWER* <b>124.4 (CTAF) 0 254.25</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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Procedure NA for arrivals at HOOME via V27 northeast bound.



ELEV 209	1400	5500	CETRA	HARBOR OM/INT OLM 5.1 / RADAR	3300	Remain within 10 NM
	OLM R-176					
	OLM 0.3					
	1787	2400				
	4.8 NM	1.8 NM				
CATEGORY	A	B	C	D		
S-ILS 17	414-½ 207 (300-½)					
S-LOC 17	640-½	433 (500-½)	640-¾	433 (500-¾)	640-1	433 (500-1)
CIRCLING	720-1	511 (600-1)	820-1¾	611 (700-1¾)	860-2	651 (700-2)

WAAS CH <b>45599</b> <b>W17A</b>	APP CRS <b>172°</b>	Rwy Idg TDZE <b>207</b> Apt Elev <b>209</b>	<b>5501</b>
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# RNAV (GPS) RWY 17

OLYMPIA RGNL (OLM)

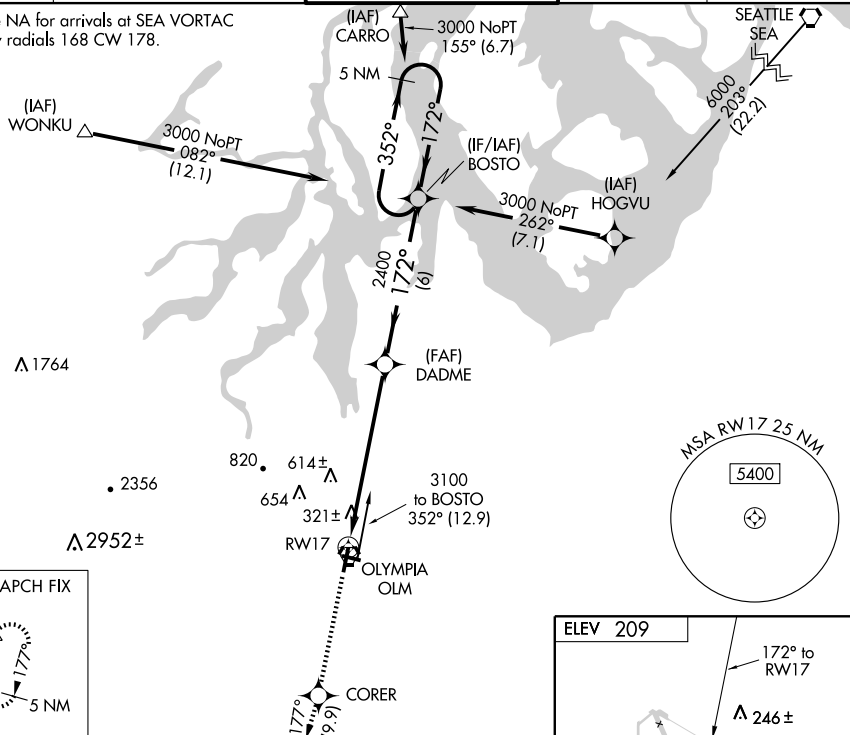
**▽** DME/DME RNP-0.3 NA. For inoperative MALS, increase LPV visibility all Cats to 1 ¼.  
**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). When local altimeter setting not received, use Sanderson Field altimeter setting and increase all DA 53 feet and all MDA 60 feet; increase LPV and LNAV/VNAV visibility all Cats, LNAV Cats C/D and circling visibility Cats C/D ¼ mile. VDP and Baro-VNAV NA when using Sanderson Field altimeter setting.



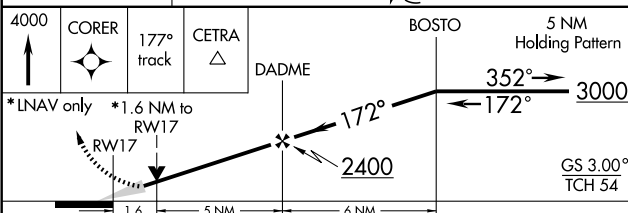
**MISSED APPROACH:** Climb to 4000 direct CORER and via 177° track to CETRA and hold, continue climb-in-hold to 4000.

ATIS <b>135.725</b>	SEATTLE APP CON <b>121.1 290.9</b>	OLYMPIA TOWER* <b>124.4 (CTAF) 0 254.25</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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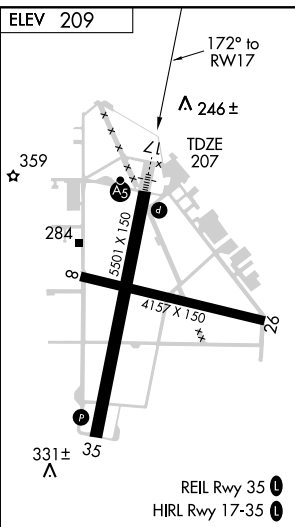
Procedure NA for arrivals at SEA VORTAC on airway radials 168 CW 178.



## MISSED APCH FIX



CATEGORY	A	B	C	D
LPV DA	590-¾ 383 (400-¾)			
LNAV/VNAV DA	636-1 429 (500-1)			
LNAV MDA	760-½ 553 (600-½)		760-1 553 (600-1)	760-1¼ 553 (600-1¼)
CIRCLING	760-1 551 (600-1)		820-1¾ 611 (700-1¾)	860-2 651 (700-2)



APP CRS **352°**  
 Rwy Idg **5501**  
 TDZE **208**  
 Apt Elev **209**

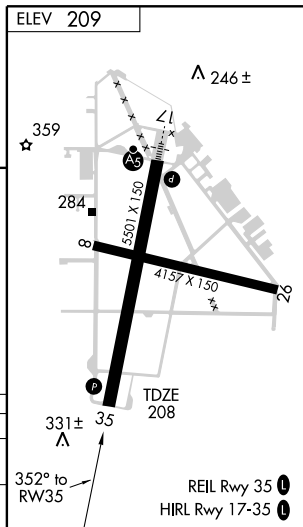
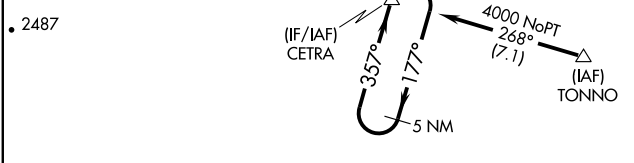
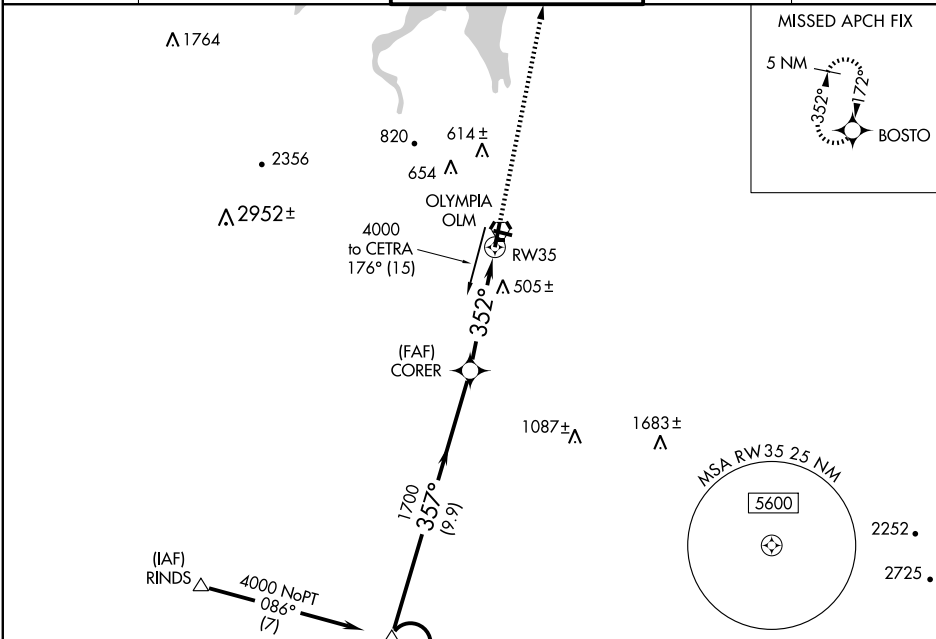
# RNAV (GPS) RWY 35

OLYMPIA RGNL (OLM)

**⚠** When local altimeter setting not received, use Sanderson Field altimeter setting and increase all MDAs 60 feet; increase visibility LNAV Cats C/D ¼ mile and circling Cat D ½ mile.  
 DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 4000 direct BOSTO and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE APP CON	OLYMPIA TOWER★	GND CON	UNICOM
<b>135.725</b>	<b>121.1 290.9</b>	<b>124.4 (CTAF) 0 254.25</b>	<b>121.6</b>	<b>122.95</b>



CATEGORY	A	B	C	D
LNAV MDA	760-1	552 (600-1)	760-1½ 552 (600-1½)	760-1¾ 552 (600-1¾)
CIRCLING	760-1	551 (600-1)	820-1¾ 611 (700-1¾)	860-2 651 (700-2)

VORTAC OLM <b>113.4</b> Chan 81	APP CRS <b>171°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>209</b>
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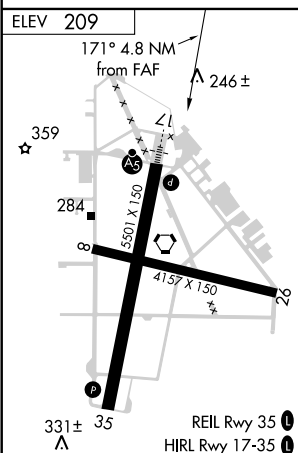
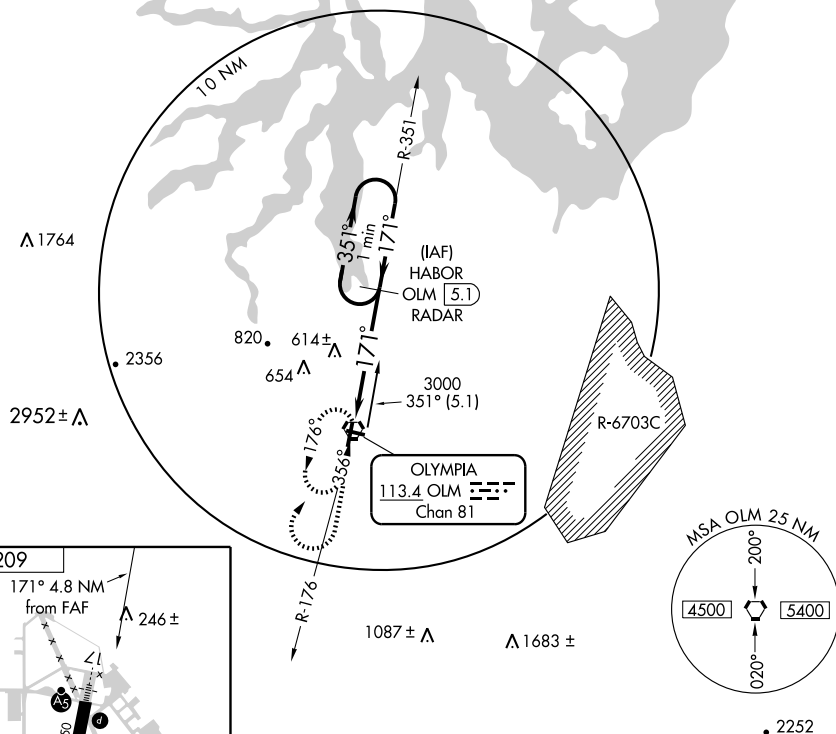
**VOR-A**  
OLYMPIA RGNL (OLM)

**▼** When local altimeter setting not received, use Sanderson  
**▲** Field altimeter setting and increase all MDA 60 feet.  
DME or RADAR required.

**MISSED APPROACH:** Climb to 1900 then climbing right turn to 4000 direct OLM VORTAC and hold, continue climb-in-hold to 4000.

ATIS <b>135.725</b>	SEATTLE APP CON <b>121.1 290.9</b>	OLYMPIA TOWER★ <b>124.4 (CTAF) 0 254.25</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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**DME or RADAR REQUIRED**



1900	4000	OLM 113.4	HABOR OLM 5.1 RADAR	One Minute Holding Pattern
VORTAC	171°	351°	2500	
4.8 NM				
CATEGORY	A	B	C	D
CIRCLING	880-1 671 (700-1)		880-2 671 (700-2)	880-2¼ 671 (700-2¼)

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

OLYMPIA, WASHINGTON

Amdt 1A 09155

46°58'N - 122°54'W

OLYMPIA RGNL (OLM)

**VOR-A**

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

VORTAC OLM <b>113.4</b> Chan <b>81</b>	APP CRS <b>356°</b>	Rwy Idg TDZE <b>208</b> Apt Elev <b>209</b>
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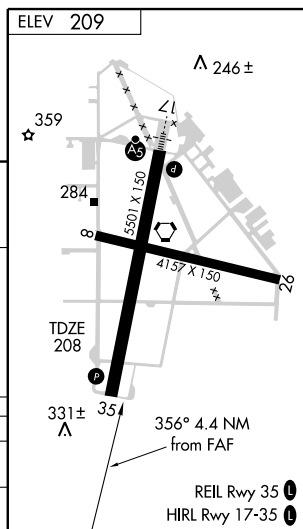
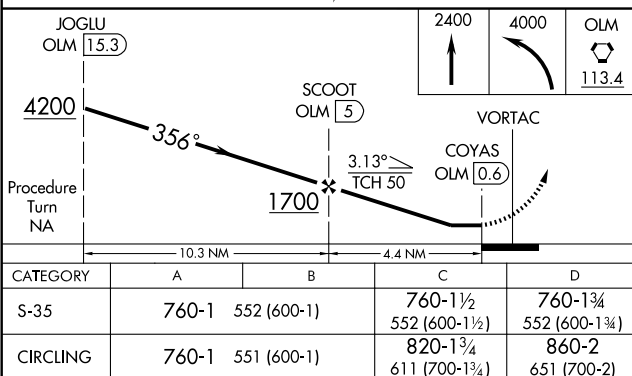
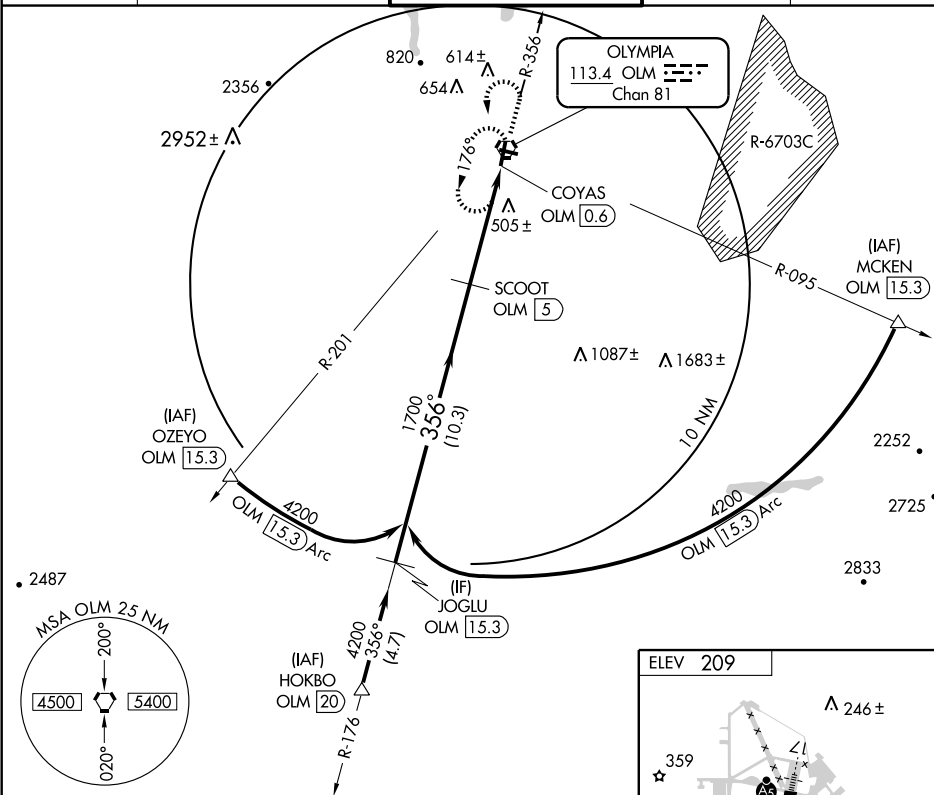
# VOR/DME RWY 35

OLYMPIA RGNL (OLM)

When local altimeter setting not received, use Sanderson Field altimeter setting and increase all MDAs 60 feet; increase visibility S-35 Cats C/D ½ mile and circling Cat D ¼ mile. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2400, then climbing left turn to 4000 direct OLM VORTAC and hold, continue climb-in-hold to 4000.

ATIS <b>135.725</b>	SEATTLE APP CON <b>121.1 290.9</b>	OLYMPIA TOWER* <b>124.4 (CTAF) 254.25</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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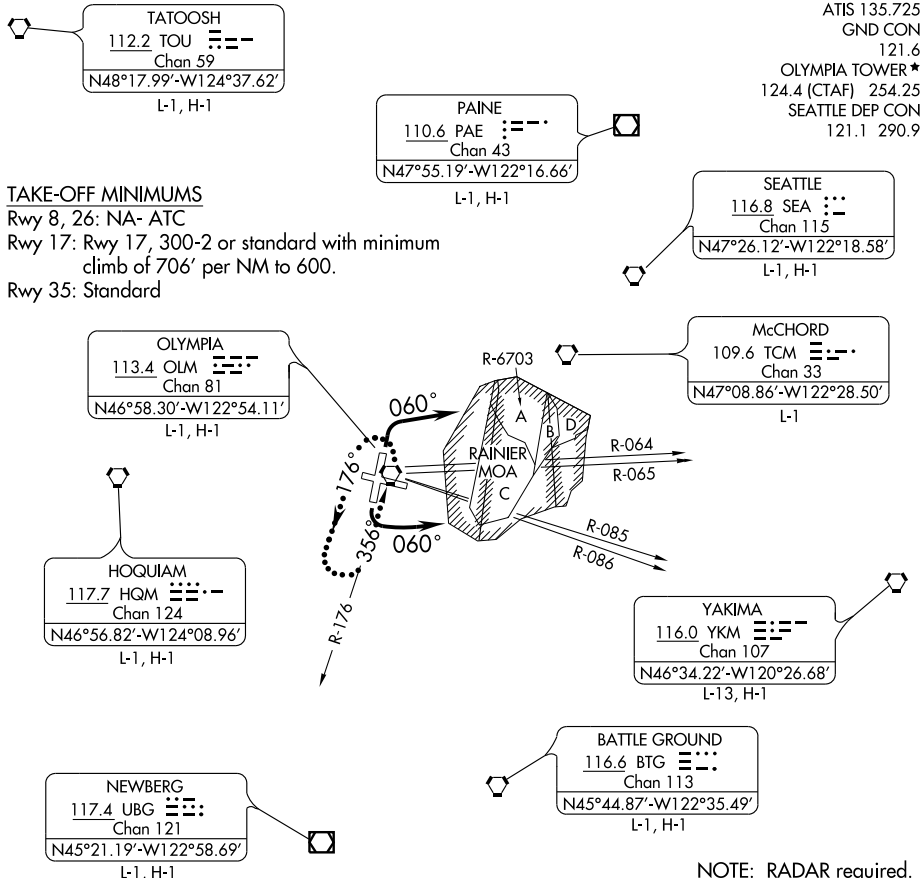


# YELM TWO DEPARTURE

(YELM2.YELM) 10210

SL-645 (FAA)

OLYMPIA RGNL (OLM)  
OLYMPIA, WASHINGTON



## TAKE-OFF MINIMUMS

Rwy 8, 26: NA- ATC

Rwy 17: Rwy 17, 300-2 or standard with minimum climb of 706' per NM to 600.

Rwy 35: Standard

## TAKE-OFF OBSTACLE NOTES

RWY 17: Multiple trees beginning 1005' from DER, 24' left of centerline, up to 100' AGL/490' MSL.

Multiple trees beginning 752' from DER, 3' right of centerline, up to 100' AGL/370' MSL.

RWY 35: Multiple trees beginning 2176' from DER, 198 feet left of centerline up to 100' AGL/313' MSL.

Multiple trees and FLDLT on HGR beginning 657' from DER, 621' right of centerline, up to 100' AGL/ 315' MSL.

## DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RUNWAY 17:** Turn left. Thence....

**TAKE-OFF RUNWAY 35:** Turn right. Thence....

....Climb via heading 060°, maintain 2000. Expect radar vectors on course and filed altitude within five minutes after departure.

**LOST COMMUNICATIONS:** If no contact with ATC within 6 NM of OLM VORTAC, or 2 minutes after departure for non-DME aircraft, turn left direct OLM VORTAC, continue climb in OLM VORTAC holding pattern to cross OLM VORTAC at or above R-086 CW R-064 4000 feet; R-065 CW R-085 7300 feet, continue climb via assigned route.

# YELM TWO DEPARTURE

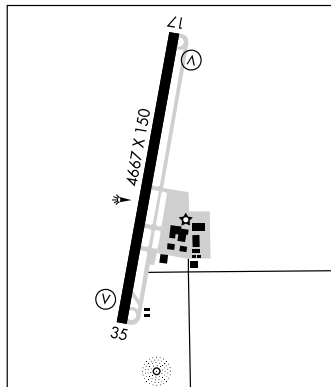
(YELM2.YELM) 10210

OLYMPIA, WASHINGTON  
OLYMPIA RGNL (OLM)

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

**OMAK** (OMK) 3 N UTC-8(-7DT) N48°27.87' W119°31.08'  
 1305 B S4 **FUEL** 100LL, JET A NOTAM FILE OMK  
**RWY 17-35:** H4667X150 (ASPH) S-75, D-200, 2D-400 HIRL  
**RWY 17:** REIL. VASI(V2L)—GA 3.0° TCH 43'.  
**RWY 35:** REIL. VASI(V2L)—GA 3.0° TCH 46'.  
**AIRPORT REMARKS:** Attended Mon-Fri 1500-0000Z+. Fuel avbl 24  
 hrs-credit card. ACTIVATE HIRL Rwy 17-35—CTAF.  
**WEATHER DATA SOURCES:** ASOS 118.325 (509) 826-2655.  
**COMMUNICATIONS:** CTAF/UNICOM 122.8  
**RCO** 122.2 (SEATTLE RADIO)  
**SEATTLE CENTER APP/DEP CON** 126.1  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE GEG.  
**SPOKANE (H) VORTACW** 115.5 GEG Chan 102 N47°33.90'  
 W117°37.61' 285° 93.4 NM to fld. 2756/21E. **HIWAS.**  
**NDB (MHW)** 219 OMK N48°27.20' W119°31.02' at fld.  
 NOTAM FILE OMK. Unusable byd 15 NM.

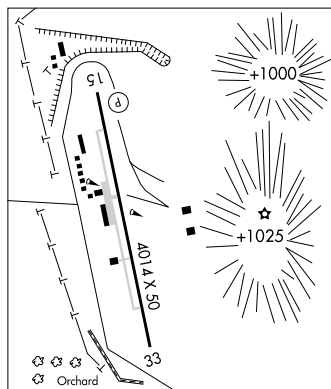


SEATTLE  
 L-13A  
 IAP

## ORCAS ISLAND (See EAST SOUND)

## OROVILLE

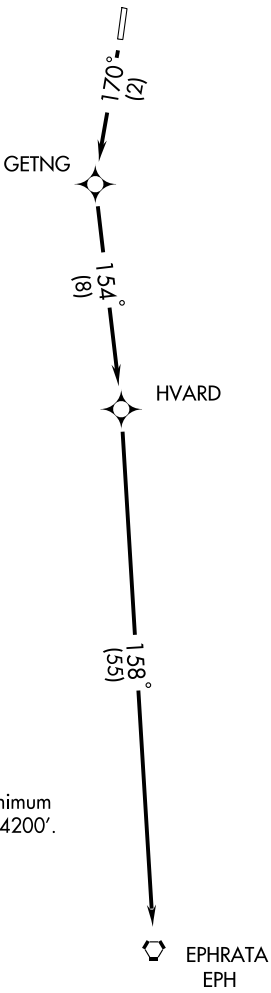
**DOROTHY SCOTT** (ØS7) 2 NE UTC-8(-7DT) N48°57.54' W119°24.72'  
 1064 B S4 **FUEL** 100LL AOE NOTAM FILE SEA  
**RWY 15-33:** H4014X50 (ASPH) S-5 MIRL  
**RWY 15:** PAPI(P2L)—GA 3.0° TCH 45'. Rgt tfc.  
**RWY 33:** Road.  
**AIRPORT REMARKS:** Attended dawn-dusk. Wildlife adjacent to rwy and  
 twy. ACTIVATE MIRL Rwy 15-33—CTAF. Customs telephone  
 509-476-2955. Flight Notification Service (ADCUS) available.  
**COMMUNICATIONS:** CTAF 122.9  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE MWH.  
**MOSES LAKE (H) VORW/DME** 115.0 MWH Chan 97 N47°12.65'  
 W119°19.01' 340° 105.0 NM to fld. 1194/18E.



SEATTLE  
 L-13A



SEATTLE CENTER  
126.1 291.6  
SEATTLE RADIO  
122.2



NOTE: 2200-2 or standard with a minimum climb of 300 Feet per Mile to 4200'.  
NOTE: 1. GPS Required.  
2. RNAV 1

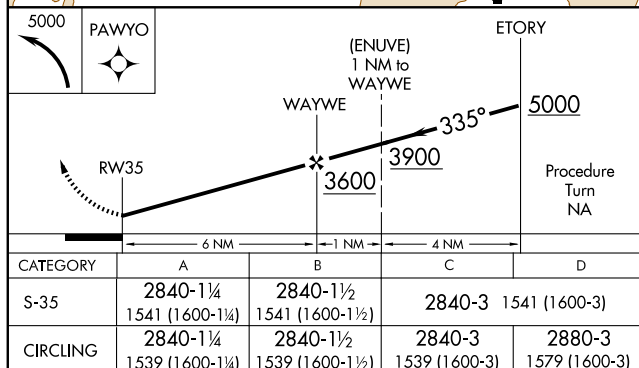
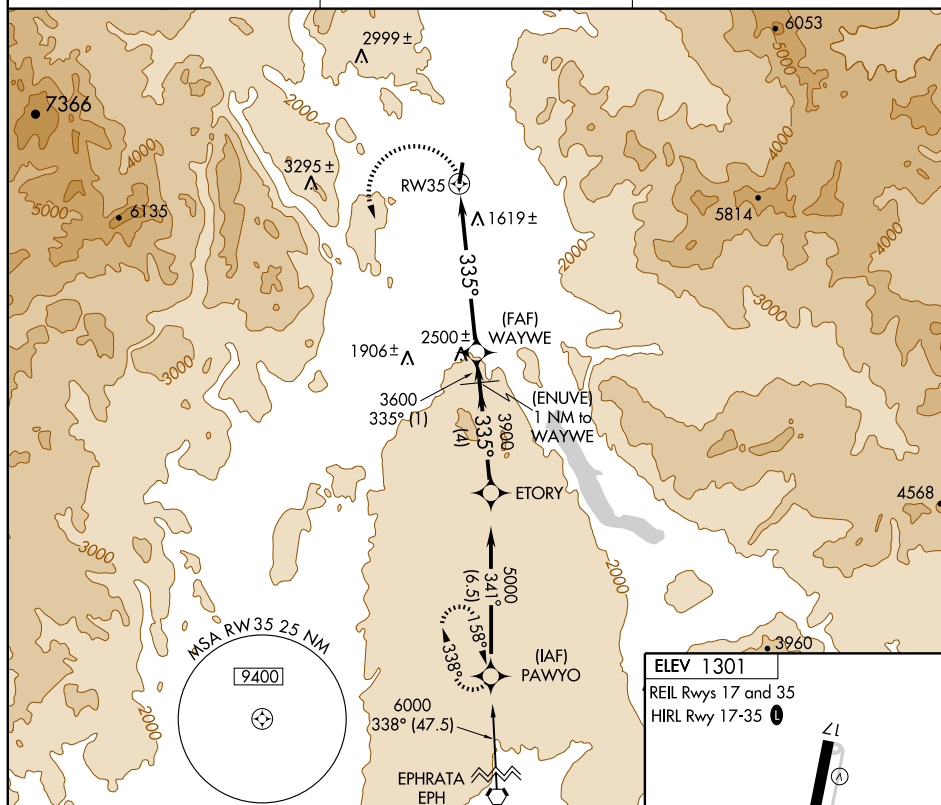
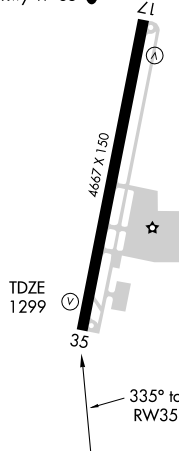
NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Climb to 4200 via 170° course to GETNG WP, 154° course to HVARD WP, and 158° course to EPH VORTAC. Thence proceed on course.  
TAKE-OFF RUNWAY 35: NA

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

APP CRS  
**335°**Rwy Idg **4667**  
TDZE **1299**  
Apt Elev **1301****GPS RWY 35**  
OMAK (OMK)▼  
▲ NAMISSED APPROACH: Climbing left turn to 5000 direct  
PAWYO WP and hold.ASOS  
**118.325**SEATTLE CENTER  
**126.1 291.6**UNICOM  
**122.8 (CTAF) 0**ELEV 1301  
REIL Rwy 17 and 35  
HIRL Rwy 17-35 0

10210

## AIRPORT DIAGRAM

AL-474 (FAA)

PASCO/TRI-CITIES (PSC)

PASCO, WASHINGTON

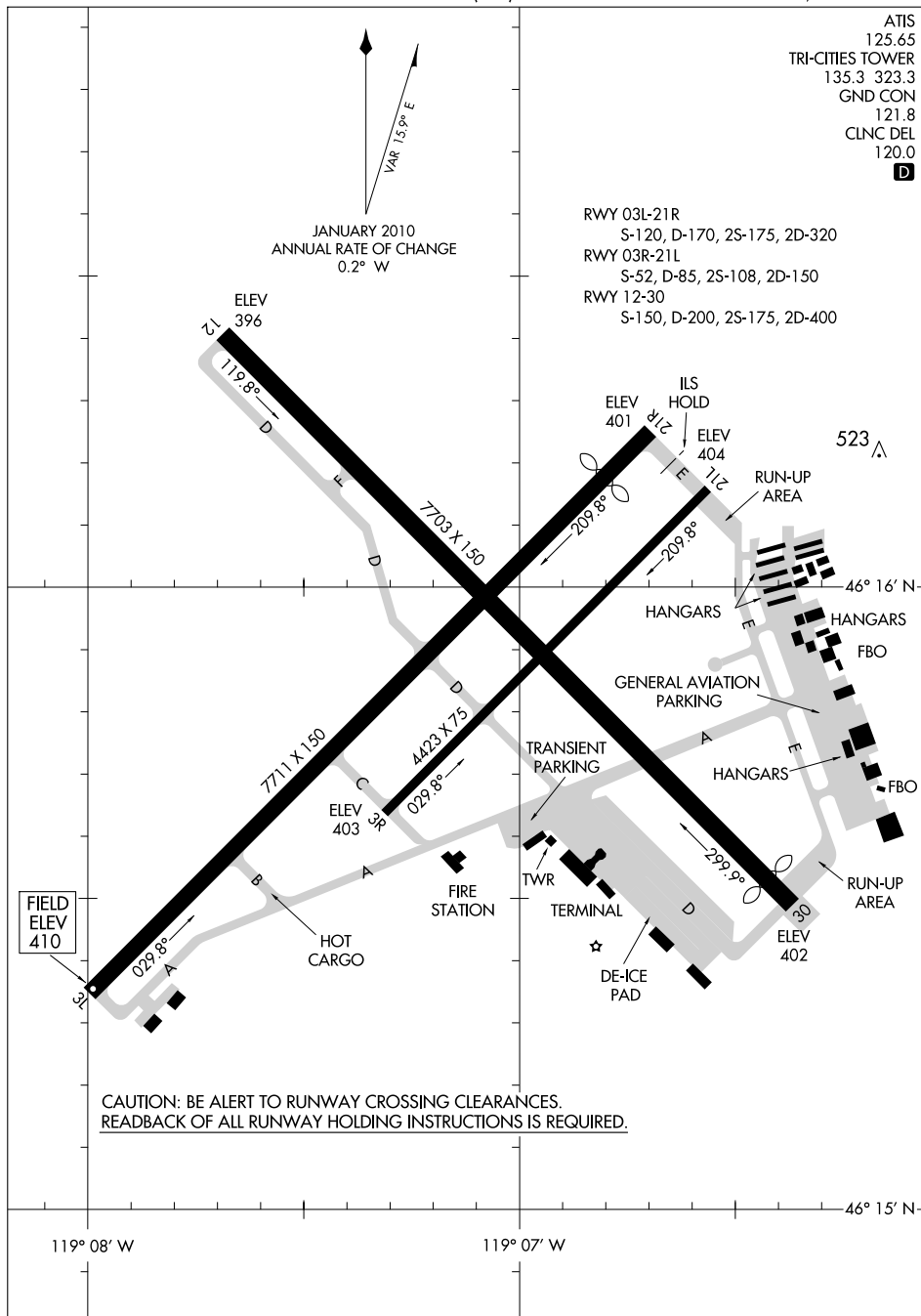
ATIS  
125.65  
TRI-CITIES TOWER  
135.3 323.3  
GND CON  
121.8  
CLNC DEL  
120.0

D

JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.2° W

RWY 03L-21R  
S-120, D-170, 2S-175, 2D-320  
RWY 03R-21L  
S-52, D-85, 2S-108, 2D-150  
RWY 12-30  
S-150, D-200, 2S-175, 2D-400

NW-1, 21 OCT 2010 to 18 NOV 2010



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 21 OCT 2010 to 18 NOV 2010

## AIRPORT DIAGRAM

PASCO, WASHINGTON  
PASCO/TRI-CITIES (PSC)

10210

## PASCO

**TRI-CITIES** (PSC) 2 NW UTC-8(-7DT) N46°15.88' W119°07.14'

410 B S4 FUEL 100LL, JET A1 + OX 2 TPA—See Remarks Class I, ARFF Index B  
NOTAM FILE PSC

**RWY 03L-21R:** H7711X150 (ASPH-GRVD) S-120, D-170, 2S-175, 2D-320 HIRL

**RWY 03L:** REIL PAPI(P4L)—GA 3.0° TCH 50'. Tree.

**RWY 21R:** MALSR. PAPI(P4L)—GA 3.0° TCH 54'. Thld dsplcd 600'.  
Pole. Rgt tfc.

**RWY 12-30:** H7703X150 (ASPH-GRVD) S-150, D-200, 2S-175,  
2D-400 MIRL

**RWY 12:** REIL. VASI(V4L)—GA 3.0° TCH 56'.

**RWY 30:** ODALS. PAPI(P4L)—GA 3.0° TCH 54'. Thld dsplcd 200'.  
Tree.

**RWY 03R-21L:** H4423X75 (ASPH) S-52, D-85, 2S-108, 2D-150

**RWY 03R:** Rgt tfc. **RWY 21L:** Pole.

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 03L:** TORA-7711 TODA-7711 ASDA-7711 LDA-7711

**RWY 03R:** TORA-4423 TODA-4423 ASDA-4423 LDA-4423

**RWY 12:** TORA-7703 TODA-7703 ASDA-7503 LDA-7503

**RWY 21L:** TORA-4423 TODA-4423 ASDA-4423 LDA-4423

**RWY 21R:** TORA-7711 TODA-7711 ASDA-7711 LDA-7711

**RWY 30:** TORA-7703 TODA-7703 ASDA-7703 LDA-7503

**AIRPORT REMARKS:** Attended 1600-0400Z. After hrs fuel call

509-547-6271 or 509-545-5524. Call out fee. Fuel 24 hour  
credit card svc avbl. Waterfowl on and in vicinity of arpt spring and fall. PPR to unscheduled air carrier ops with  
more than 30 passenger seat call arpt manager 509-547-6352. TPA-1910(1500) turbine powered acft, all  
others 1410(1000). Rwy 21L and Rwy 03R not avbl as movement area for air carrier acft with more than 9  
passenger seats or greater for ldg and txf. Rwy 03R-21L is avbl for air carrier acft for taxiing during dalgt and  
VFR conditions only. Touchdown rwy visual range avbl for Rwy 21R. When twr clsd HIRL Rwy 03L-21R and MIRL  
Rwy 12-30 preset on low intensity to increase intensity and ACTIVATE MALSR Rwy 21R and ODALS Rwy  
30—CTAF.

**WEATHER DATA SOURCES:** ASOS (509) 547-7379. LAWRS. SAWRS.

**COMMUNICATIONS:** CTAF 135.3 ATIS 125.65 UNICOM 122.95

**JUMP-OFF-JOE** RCO 122.4 (SEATTLE RADIO)

⑧ **CHINOOK APP/DEP CON** 128.75 N and W 133.15 S and E (1400-0600Z).

⑧ **SEATTLE CENTER APP/DEP CON** 132.6 (0600-1400Z).

**TOWER** 135.3 (1400-0600Z) **GND CON** 121.8 **CLNC DEL** 120.0

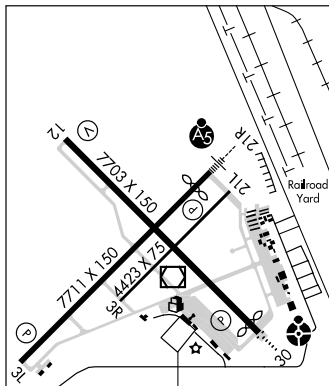
**AIRSPACE:** CLASS D svc 1400-0600Z other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PSC.

**PASCO (L) VORW/DME** 108.4 PSC Chan 21 N46°15.78' W119°06.94' at fld. 404/20E.

**DUNEZ NDB (LOM)** 331 PS N46°20.29' W119°00.75' 205° 6.3 NM to fld. Unmonitored when twr clsd.

**ILS** 108.7 I-PSC Rwy 21R. Class IE. LOM DUNEZ NDB. Unmonitored when tower closed.



**PEARSON FLD** (See VANCOUVER)

**PELLY** N47°06.94' W119°16.47'. NOTAM FILE MWH.

**NDB (MHW/LOM)** 408 MW 324° 5.9 NM to Grant Co. Intl. Unmonitored when tower closed.

**PENN COVE** N48°14.68' W122°43.47'. NOTAM FILE SEA.

**(L) VORW/DME** 117.2 CVV Chan 119 N48°14.68' W122°43.47' 060° 2.1 NM to AJ Eisenberg.  
200/19E.

DME portion unusable:

126°-160° 30 NM blo 2,200'.

250°-260° byd 30 NM blo 3,400'.

330°-360° byd 30 NM blo 2,200'.

**PIERCE CO-THUN** (See PUYALLUP)

SEATTLE

H-1C, L-13A

IAP, AD

SEATTLE

L-13A

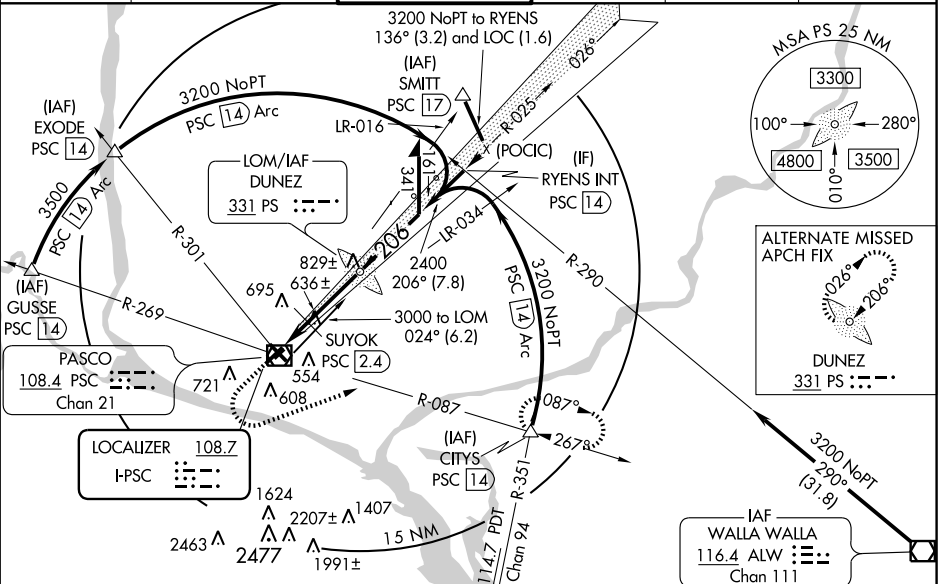
SEATTLE

L-1E

ILS or LOC RWY 21R  
PASCO/ TRI-CITIES (PSC)

MALSR  
A5

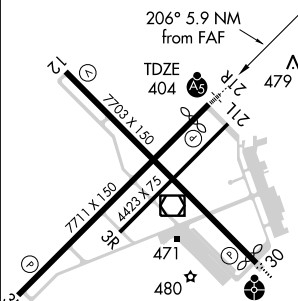
**MISSED APPROACH:** Climb to 1200 then climbing left turn to 3200 via heading 050° and PSC VOR/DME R-087 to CITYS INT/ PSC 14 DME and hold.

UNICOM  
122.95

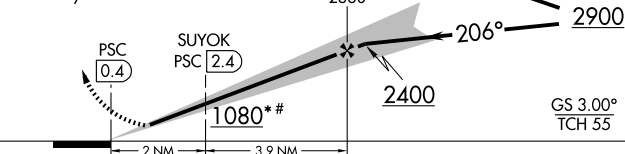
**D**

1200 ↑	3200 ↖ 050°	PSC R-087 <u>108.4</u>	CITYS △
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Remain  
within 10 NM



# 1180 when using Hermiston altimeter setting.  
\* LOC only



CATEGORY	A	B	C	D
S-1LS 21R	**604/24 200 (200-½)			
S-LOC 21R	1080/24	676 (700-½)	1080-1½ 676 (700-1½)	1080-1¾ 676 (700-1¾)
CIRCLING	1080-1	670 (700-1)	1080-2 670 (700-2)	1080-2¼ 670 (700-2¼)
SUYOK FIX MINIMUMS				
S-LOC 21R	900/24	496 (500-½)	900/40 496 (500-¾)	900/50 496 (500-1)
CIRCLING	920-1	510 (600-1)	920-1½ 510 (600-1½)	1040-2 630 (700-2)

46°16'N-119°07'W

PASCO/ TRI-CITIES (PSC)  
ILS or LOC RWY 21R

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

WAAS CH <b>40206</b> <b>W03A</b>	APP CRS <b>026°</b>	Rwy Idg <b>7111</b> TDZE <b>410</b> Apt Elev <b>410</b>
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# RNAV (GPS) RWY 3L

## PASCO/TRI-CITIES (PSC)

PASCO/TRI-CITIES (PSC)

**▼** When local altimeter setting not received, use Hermiston altimeter setting and increase all DAs/MDAs 100 feet and all visibilities ¼ mile.

**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).

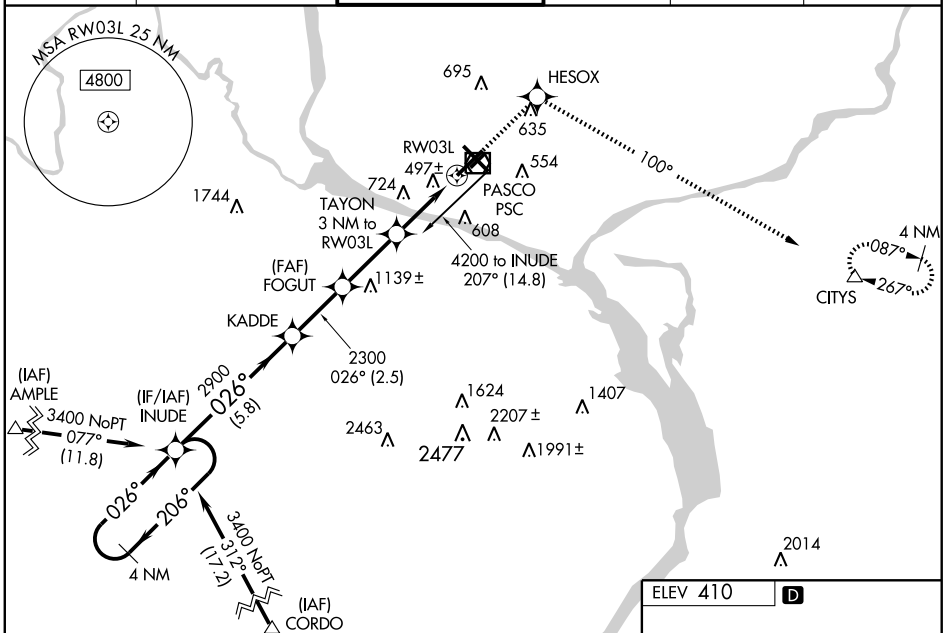
VDP and Baro-VNAV NA when using Hermiston altimeter setting.

Circling to Rwy 3R NA at night.      Visibility reduction by helicopters NA.

DME/DME RNP: 0.3 NA.

MISSED APPROACH: Climb to 3200  
direct HESOX and via 100° track to  
CITYS and hold.

ATIS 125.65	CHINOOK APP CON* 128.75 377.2	TRI-CITIES TOWER* 135.3 (CTAF) 0 323.3	GND CON 121.8	CLNC DEL 120.0	UNICOM 122.95
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VGS and RNAV glidepath not coincident.

4 NM Holding Pattern

INUDE

KADDE

FOGUT

TAYON 3 NM to RW03L

RW03L

3400

206°

026°

2900

2300

\*1400

5.8 NM

2.5 NM

2.7 NM

1.4 NM

1.6 NM

GS 3.00°

TCH 50

3200

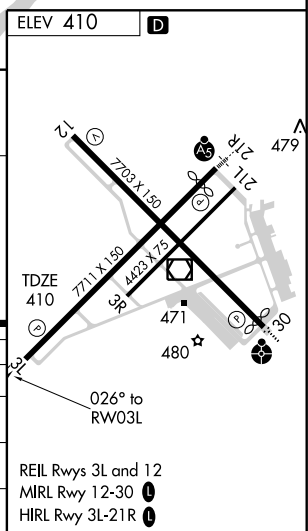
HESOX

100° tr

CITY

\*LNAV only

CATEGORY		A		B		C		D	
LPV	DA	660-1 250 (300-1)							
LNAV/ VNAV	DA	829-1½ 419 (500-1½)							
LNAV	MDA	960-1	550 (600-1)			960-1½ 550 (600-1½)	960-1¾ 550 (600-1¾)		
CIRCLING		960-1	550 (600-1)			960-1½ 550 (600-1½)	1040-2 630 (700-2)		



WAAS CH <b>58006</b> <b>W12A</b>	APP CRS <b>116°</b>	Rwy Idg <b>7503</b> TDZE <b>402</b> Apt Elev <b>410</b>
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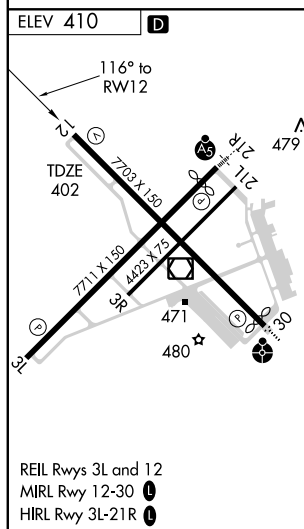
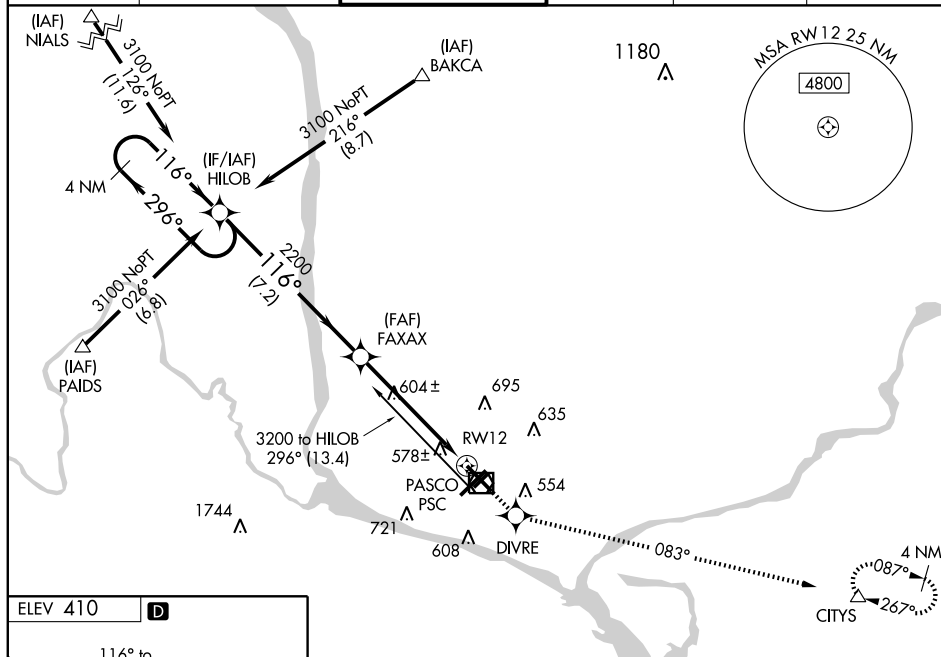
# RNAV (GPS) RWY 12

PASCO/TRI-CITIES (PSC)

**⚠** When local altimeter setting not received, use Hermiston altimeter setting and increase all DAs/MDAs 100 feet and all visibilities ½ mile.  
 For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).  
 VDP and Baro-VNAV NA when using Hermiston altimeter setting.  
 Circling to Rwy 3R NA at night. DME/DME RNP-0.3 NA.

**MISSED APPROACH:** Climb to 3200  
 direct DIVRE and via 083° track to  
 CITYS and hold.

ATIS <b>125.65</b>	CHINOOK APP CON* <b>128.75 377.2</b>	TRI-CITIES TOWER* <b>135.3 (CTAF) 0 323.3</b>	GND CON <b>121.8</b>	CLNC DEL <b>120.0</b>	UNICOM <b>122.95</b>
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4 NM Holding Pattern		HILOB	3200	DIVRE	083° tr	CITYS
3100		296°	116°	116°	* LNAV only	
GS 3.00° TCH 56		2200	* 1.3 NM to RWY 12		RWY 12	
		7.2 NM	4.1 NM	1.3 NM		
CATEGORY	A	B	C	D		
LPV DA	748-1¼		346 (400-1¼)			
LNAV/VNAV DA	894-1¾		492 (500-1¾)			
LNAV MDA	860-1	458 (500-1)	860-1¼	860-1½	458 (500-1½)	
CIRCLING	920-1	510 (600-1)	920-1½	1040-2	630 (700-2)	





WAAS CH <b>86605</b> <b>W30A</b>	APP CRS <b>296°</b>	Rwy Idg <b>7503</b> TDZE <b>405</b> Apt Elev <b>410</b>
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# RNAV (GPS) RWY 30

PASCO/TRI-CITIES (PSC)

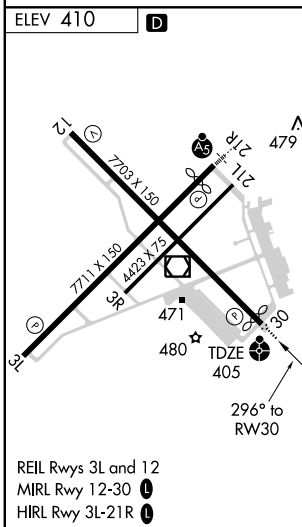
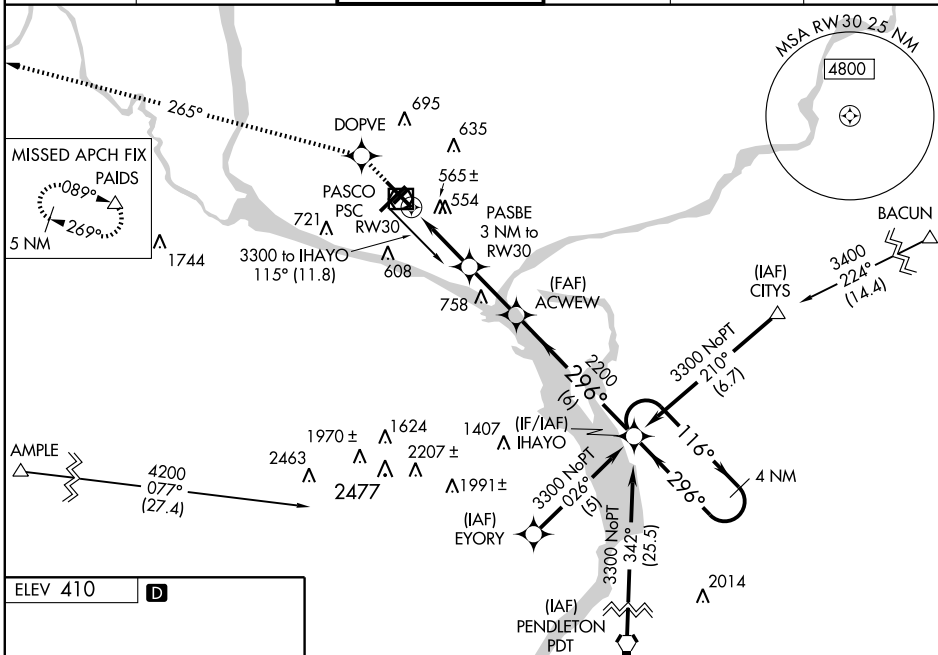
**▼** When local altimeter setting not received, use Hermiston altimeter setting and increase all DAs/MDAs 100 feet and all visibilities  $\frac{1}{2}$  mile.  
**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).  
 VDP and Baro-VNAV NA when using Hermiston altimeter setting.  
 Inoperative table does not apply. Circling to Rwy 3R NA at night.  
 Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.



ODALS



**MISSED APPROACH:** Climb to 5200 direct DOPVE and via 265° track to PAIDS and hold, continue climb-in-hold to 5200.

ATIS <b>125.65</b>	CHINOOK APP CON* <b>128.75 377.2</b>	TRI-CITIES TOWER* <b>135.3 (CTAF) 0 323.3</b>	GND CON <b>121.8</b>	CLNC DEL <b>120.0</b>	UNICOM <b>122.95</b>
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5200 ↑		DOPVE 		265° tr		PAIDS △		IHAYO		4 NM Holding Pattern	
* LNAV only		RW30 		PASBE 3 NM to RW30		ACWEW ✖		116° → 3300 ← 296°		GS 3.00° TCH 54	
1.3 NM		1.7		2.4 NM		6 NM					
CATEGORY		A		B		C		D			
LPV DA				777-1¼ 372 (400-1¼)							
LNAV/ VNAV DA				913-1¾ 508 (600-1¾)							
LNAV MDA		880-1 475 (500-1)				880-1¼ 475 (500-1¼)		880-1½ 475 (500-1½)			
CIRCLING		920-1 510 (600-1)				920-1½ 510 (600-1½)		1040-2 630 (700-2)			

## TRI-CITIES FOUR DEPARTURE

SL-474 (FAA)

PASCO/TRI-CITIES (PSC)  
PASCO, WASHINGTON

ATIS 125.65

CLNC DEL

120.0

GND CON

121.8

TRI-CITIES TOWER ★

135.3 (CTAF) 323.3

CHINOOK DEP CON

128.75 377.2

WENATCHEE

111.0 EAT

Chan 47

N47°23.98'-W120°12.65'

L-13

EPHRATA

112.6 EPH

Chan 73

N47°22.68'-W119°25.44'

L-13, H-1

SPOKANE

115.5 GEG

Chan 102

N47°33.90'-W117°37.61'

L-13, H-1

MOSES LAKE

115.0 MWH

Chan 97

N47°12.65'-W119°19.01'

L-13, H-1

ELLENSBURG

117.9 ELN

Chan 126

N47°01.46'-W120°27.51'

L-13, H-1

PULLMAN

109.0 PUW

Chan 27

N46°40.46'-W117°13.41'

L-13

PASCO

108.4 PSC

Chan 21

N46°15.78'-W119°06.94'

L-13

YAKIMA

116.0 YKM

Chan 107

N46°34.22'-W120°26.68'

L-13, H-1

NEZ PERCE

108.2 MQG

Chan 19

N46°22.89'-W116°52.17'

L-13

WALLA WALLA

116.4 ALW

Chan 111

N46°05.22'-W118°17.55'

L-13

KLICKITAT

112.3 LTJ

Chan 70

N45°42.81'-W121°06.05'

L-13, H-1

PENDLETON

114.7 PDT

Chan 94

N45°41.91'-W118°56.32'

L-13, H-1

NOTE: SID will not be assigned when Control Tower is closed.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

Fly runway heading, or ATC assigned heading, for vector to assigned route/fix. Maintain 10,000' or assigned lower altitude. Expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: Climb runway heading to 3,000' then reverse course direct PSC VOR/DME to cross at or above MEA for route of flight.

## TRI-CITIES FOUR DEPARTURE

(TRIC4.PSC) 10210

PASCO, WASHINGTON  
PASCO/TRI-CITIES (PSC)

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME PSC <b>108.4</b> Chan <b>21</b>	APP CRS <b>291°</b>	Rwy Idg <b>7503</b> TDZE <b>405</b> Apt Elev <b>410</b>
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VOR/DME RWY 30  
PASCO/TRI-CITIES(PSC)

**T** Inoperative table does not apply to Cat C.  
**A** Visibility reduction by helicopters NA.  
When local altimeter setting not received, use Hermiston altimeter setting and increase all MDA 100 feet, increase S-30 visibility Cat C ¼ mile, Cat D ½ mile and circling Cat D ½ mile.

ODALS

**MISSED APPROACH:** Climbing right turn to 3200 via heading 130° and PSC R-087 to CITYS INT/PSC 14 DME and hold.

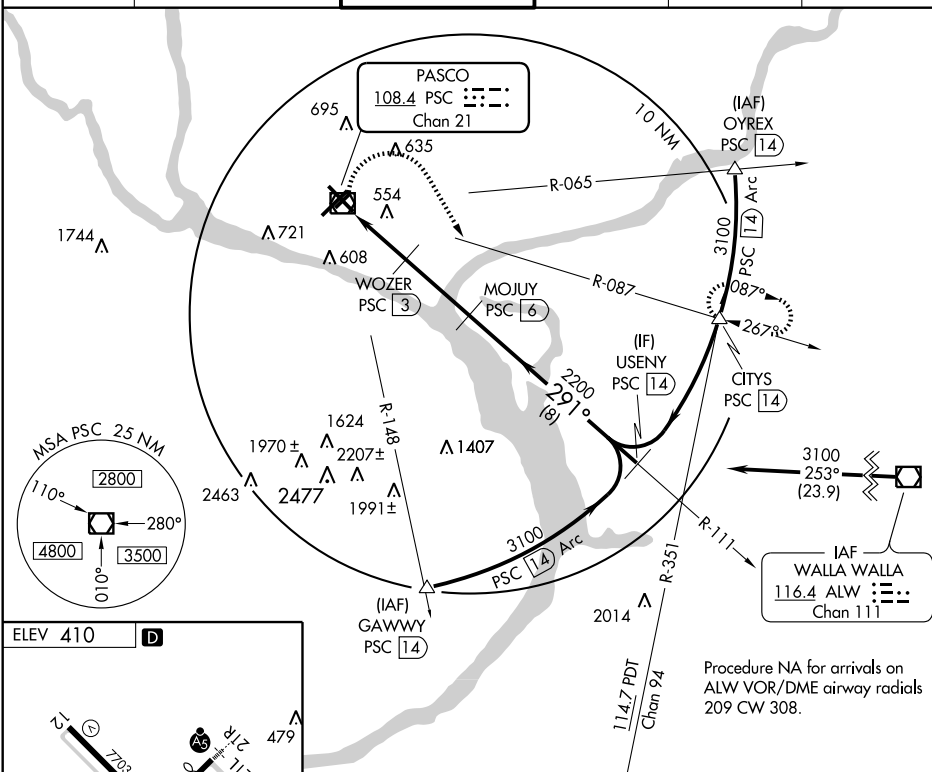
ATIS  
125.65

CHINOOK APP CON★  
128.75 377.2

TRI-CITIES TOWER★  
135.3 (CTAF) L 323.3

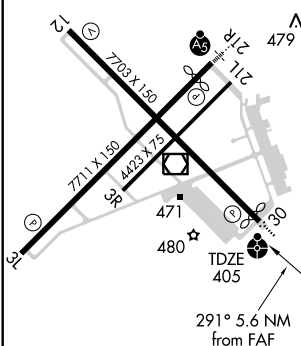
GND CON  
121.8

CLNC DEL  
**120.0**

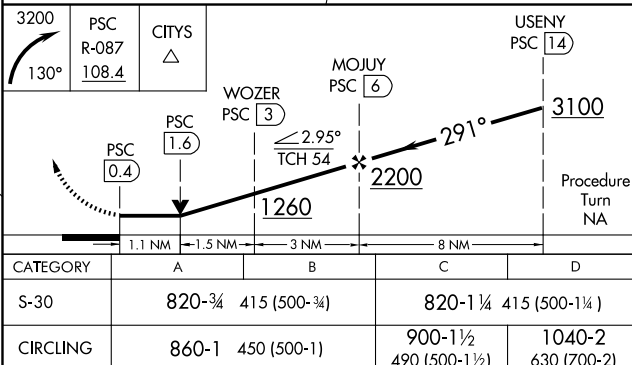
UNICOM  
122.95

ELEV 410	D
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**D**



REIL Rwy 3L and 12  
MIRL Rwy 12-30 **L**  
HIRL Rwy 3L-21R **L**



PASCO, WASHINGTON  
Amdt 3 10210

46°16'N-119°07'W

PASCO/ TRI-CITIES (PSC)  
VOR/DME RWY 30

NW-1. 21 OCT 2010 to 18 NOV 2010

VOR/DME PSC <b>108.4</b> Chan <b>21</b>	APP CRS <b>195°</b>	Rwy Idg <b>7111</b> TDZE <b>404</b> Apt Elev <b>410</b>
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VOR RWY 21R  
PASCO/ TRI-CITIES (PSC)

**T** If local altimeter setting not received, use Hermiston altimeter setting and increase all MDAs 100 feet.  
**A** VDP NA when using Hermiston altimeter setting.  
ADF or DME required. Circling to Rwy 03R NA at night.

MALSR



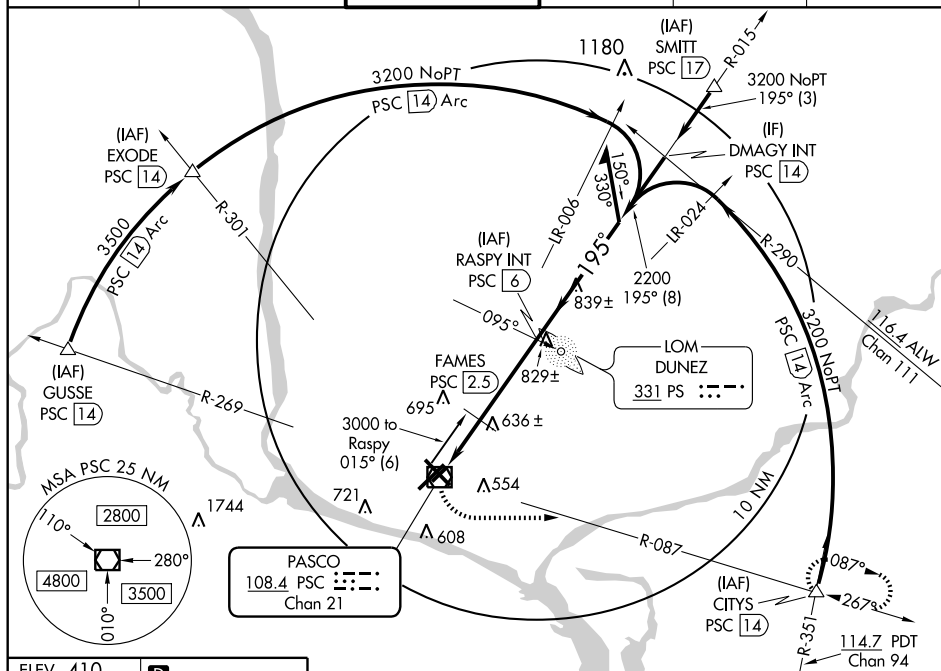
**MISSED APPROACH:** Climbing left turn to 3200 via heading 070° and PSC VOR/DME R-087 to CITYS INT/PSC 1.4 DME and hold.

ATIS  
125.65

CHINOOK APP CON★  
128.75 377.2

TRI-CITIES TOWER★  
135.3 (CTAF) 323.3

GND CON  
**121.8**

CLNC DEL  
**120.0**UNICOM  
122.95

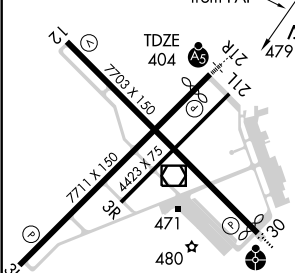
NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

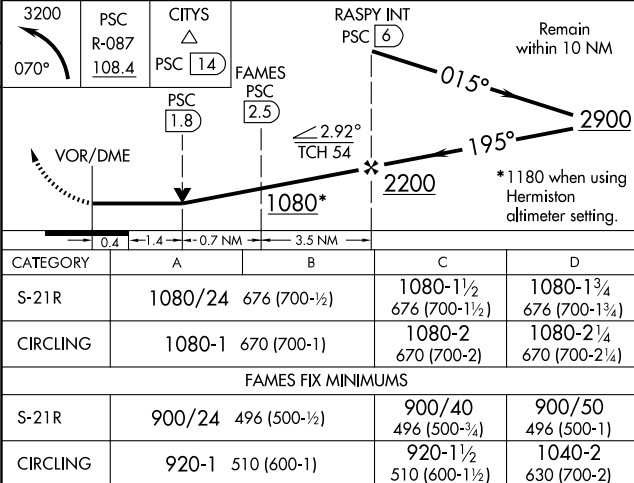
ELEV 410

**D**

195° 5.6 NM  
from FAF



REIL Rwy 3L and 12  
MIRL Rwy 12-30 **L**  
HIRL Rwy 3L-21R **L**



PASCO, WASHINGTON  
Amdt 5A 10210

PASCO/ TRI-CITIES (PSC)  
VOR RWY 21R

46°16'N-119°07'W

**POINT ROBERTS AIRPARK** (1RL) 1 SW UTC-8(-7DT) N48°58.78' W123°04.73'

SEATTLE

10 NOTAM FILE SEA

RWY 16-34: 2265X125 (TURF)

RWY 16: Brush. Rgt tfc.

RWY 34: Brush.

**AIRPORT REMARKS:** Attended Apr-Oct continuously. When able land to the N and depart to the S. Traffic pattern W of fld over water. Noise abatement procedures in effect, contact airport manager for details at 360-945-3139.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**PORT ANGELES** N48°06.99' W123°29.13'

SEATTLE

RCO 122.6 (SEATTLE RADIO)

L-1E

**PORT ANGELES CGAS** (NOW) (KNOW) CG 2 N UTC-8(-7DT) N48°08.49' W123°24.84'

SEATTLE

13 B FUEL J5 NOTAM FILE SEA

L-1E

RWY 07-25: H4500X150 (ASPH) MIRL

IAP, DIAP

**MILITARY SERVICE:** JASU 1(MD-3) FUEL J5. Avbl 1500-0000Z, other times ltd to search and rescue and CG missions. **TRAN ALERT** Tran acft arrive between 1500-0000Z only. Ctc Port Angeles Air on 345.0 or 127.7 15 min prior to ldg.

**MILITARY REMARKS:** RSTD CLOSED to non-CG fixed wing acft. 24 hr PPR C360-417-5840. **CAUTION** 150' twr 75 yards south of rwy, marked by strobe lgt.

**COMMUNICATIONS:** CTAF/UNICOM 122.975

SEATTLE RADIO 122.6

WHIDBEY APP/DEP 118.2 285.65 CLNC DEL 124.15

PORT ANGELES AIR 127.7 345.0

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA

EDIZ HOOK NDB (MHW) 338 K N48°08.39' W123°24.13' at fld. OTS indef.

NDB unusable:

085°-110° byd 20 NM

180°-245° byd 15 NM

110°-140° byd 15 NM

245°-340° byd 10 NM

140°-180° byd 10 NM

**COMM/NAV/WEATHER REMARKS:** Advisory information avbl at Port Angeles Air on prior notice; other CG frequencies avbl on request.

HELIPAD H1: H100X100 (ASPH)

## PORT ANGELES

**WILLIAM R FAIRCHILD INTL** (CLM) 3 NW UTC-8(-7DT) N48°07.21' W123°29.98'

SEATTLE

291 B S4 FUEL 100LL, JET A OX 2 LRA NOTAM FILE CLM

H-1B, L-1E

RWY 08-26: H6347X150 (ASPH-GRVD) S-55, D-66, 2S-83, 2D-115 MIRL

IAP

RWY 08: MALSR. VASI(V4L)—GA 3.0° TCH 47'. Trees.

RWY 26: REIL. SAVASI(S2L)—GA 4.0° TCH 49'. Thld dspcd 1354'.

Antenna. Rgt tfc.

RWY 13-31: H3245X50 (ASPH) S-30 LIRL 1.4% up SE

RWY 13: Trees. RWY 31: Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended 1500-0100Z. For after hours Jet A call 360-452-6206. Rwy 13-31 CLOSED SS to SR. Waterfowl and birds on and invof arpt. Increased bird activity due to waste landfill located ½ mile northwest AER 08. No air carrier ops. Arpt surrendered arpt opr certificate 12/9/05. **ACTIVATE** MIRL Rwy 08-26 and MALSR Rwy 08—CTAF.

**WEATHER DATA SOURCES:** ASOS 135.175 (360) 457-1070.

**COMMUNICATIONS:** CTAF/UNICOM 122.975

PORT ANGELES RCO 122.6 (SEATTLE RADIO)

Ⓡ WHIDBEY APP/DEP CON 118.2 CLNC DEL 124.15

**AIRSPACE:** CLASS E svc 1300-0730Z other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA.

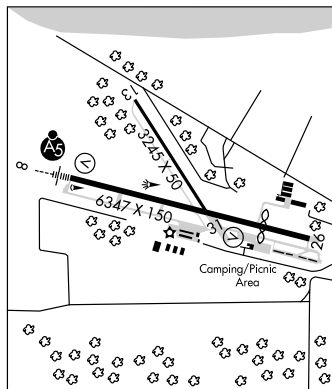
TATOOSH (H) VORTACW 112.2 TOU Chan 59 N48°17.99'

W124°37.62' 081° 46.5 NM to fld. 1652/22E. HIWAS.

ELWHA NDB (MHW/LOM) 515 CL N48°09.01' W123°40.22' 083° 7.1 NM to fld. NOTAM FILE CLM.

NDB unusable 100°-235° beyond 12 NM.

ILS 108.9 I-CLM Rwy 08. Class IA. LOM ELWHA NDB. Localizer unusable inside thld.



**PORT OF ILWACO** (See ILWACO)

**PORT OF POULSBORO MARINA MOORAGE SPB** (See POULSBORO)

LOC I-CLM <b>108.9</b>	APP CRS <b>083°</b>	Rwy Idg TDZE Apt Elev	<b>6347</b> <b>284</b> <b>291</b>
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## ILS or LOC RWY 8

PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)

- ▼** Circling NA south of Rwy 8-26.  
**▲** DME required.  
 DME from TOU VORTAC. Simultaneous reception of I-CLM and TOU DME required.  
 If local altimeter setting not received, use Friday Harbor altimeter setting and increase all MDAs 100 feet. ILS procedure NA.



**MISSED APPROACH:** Climb to 1000 then climbing left turn to 5400 via heading 030° and CVV R-247 to JIGEB/CVV 12.1 DME and hold, continue climb-in-hold to 5400.

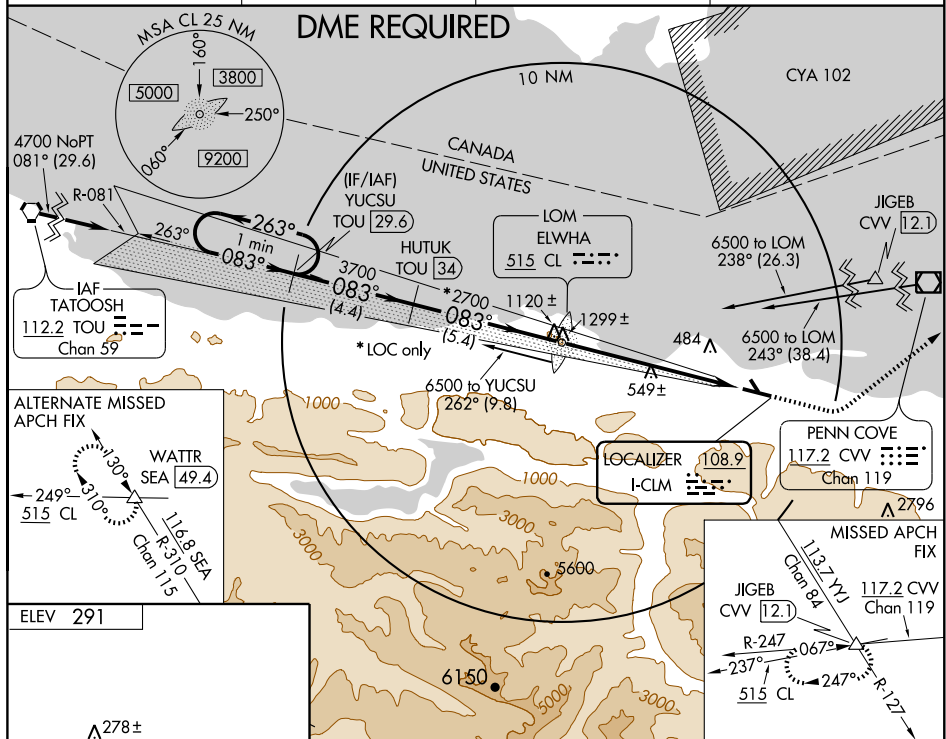
ASOS  
**135.175**

WHIDBEY APP CON \*  
**118.2 285.65**

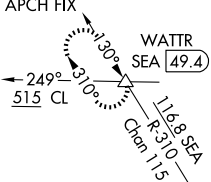
CLNC DEL  
**124.15**

UNICOM  
**122.975 (CTAF) 0**

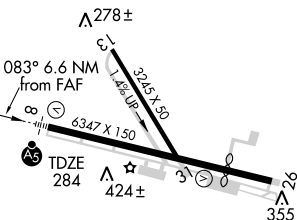
## DME REQUIRED



ALTERNATE MISSED  
APCH FIX



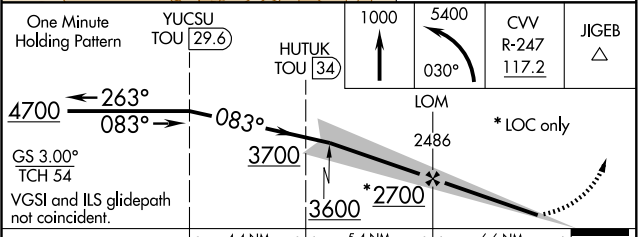
ELEV 291



LURL Rwy 13-31  
MIRL Rwy 8-26  
REIL Rwy 26

FAF to MAP 6.6 NM

Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12



CATEGORY	A	B	C	D
S-ILS 8		486-1/2	202 (200-1/2)	
S-LOC 8	840-1/2	556 (600-1/2)	840-1 556 (600-1)	840-1 1/4 556 (600-1 1/4)
CIRCLING	840-1	549 (600-1)	840-1 1/2 549 (600-1 1/2)	860-2 569 (600-2)

PORT ANGELES, WASHINGTON

Amdt 2A 09295

PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)

48°07'N-123°30'W

ILS or LOC RWY 8

WAAS CH <b>77703</b> <b>W08A</b>	APP CRS <b>082°</b>	Rwy Idg TDZE Apt Elev	<b>6347</b> <b>284</b> <b>291</b>
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## RNAV (GPS) RWY 8

PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)



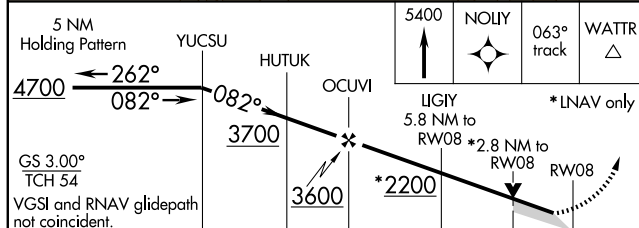
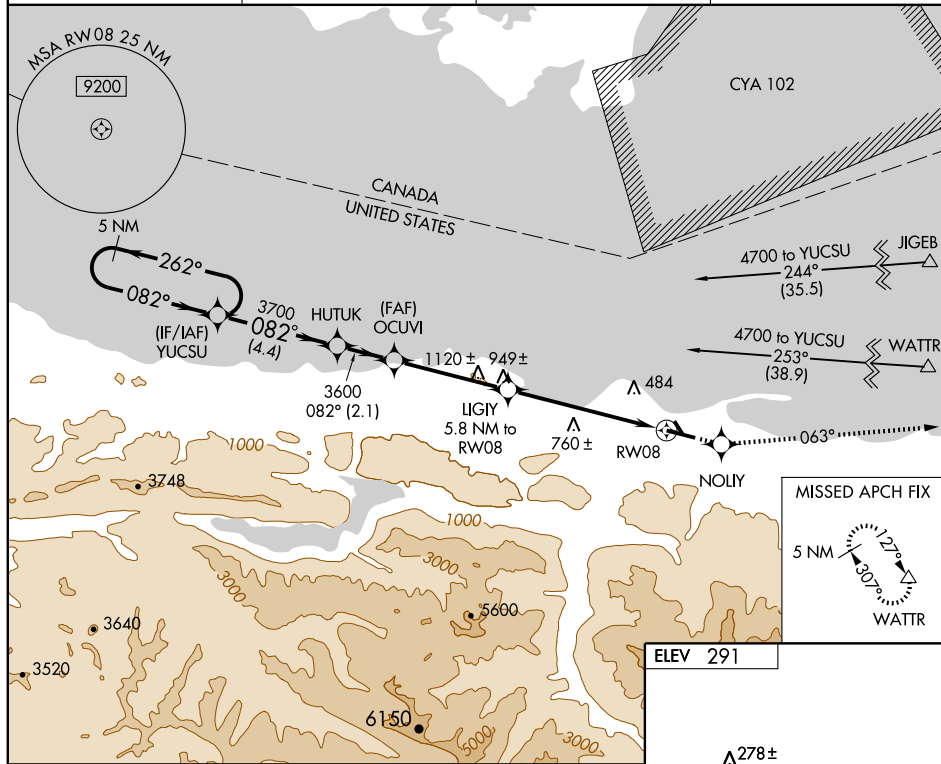
Circling NA south of Rwy 8-26. DME/DME RNP- 0.3 NA.  
If local altimeter setting not received, use Friday Harbor  
altimeter setting and increase all DAs/MDAs 100 feet.  
VDP NA when using Friday Harbor altimeter setting.

MALSR

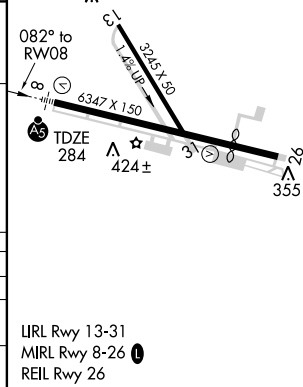


MISSED APPROACH: Climb to 5400 direct  
NOLLY and via 063° track to WATTR and  
hold, continue climb-in-hold to 5400.

ASOS <b>135.175</b>	WHIDBEY APP CON * <b>118.2 285.65</b>	CLNC DEL <b>124.15</b>	UNICOM <b>122.975 (CTAF) ①</b>
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CATEGORY	A	B	C	D
LPV DA		596-1/2	312 (400-1/2)	
LNAV MDA	1240-3/4 956 (1000-3/4)	1240-1 956 (1000-1)	1240-2 1/2	956 (1000-2 1/2)
CIRCLING	1240-1 1/4 949 (1000-1 1/4)	1240-1 1/2 949 (1000-1 1/2)	1240-3	949 (1000-3)



PORT ANGELES, WASHINGTON

Orig-A 09295

PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)

48°07'N-123°30'W

RNAV (GPS) RWY 8

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

APP CRS  
**263°**

Rwy Idg **4993**  
TDZE **282**  
Apt Elev **291**

# RNAV (GPS) RWY 26

PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)

**⚠** Circling NA south of Rwy 8-26. DME/DME RNP- 0.3 NA.  
**⚠** Visibility reduction by helicopters NA. When local altimeter setting not received, use Friday Harbor altimeter setting; increase all MDA 100 feet and visibility Cats B/C/D ½ mile.

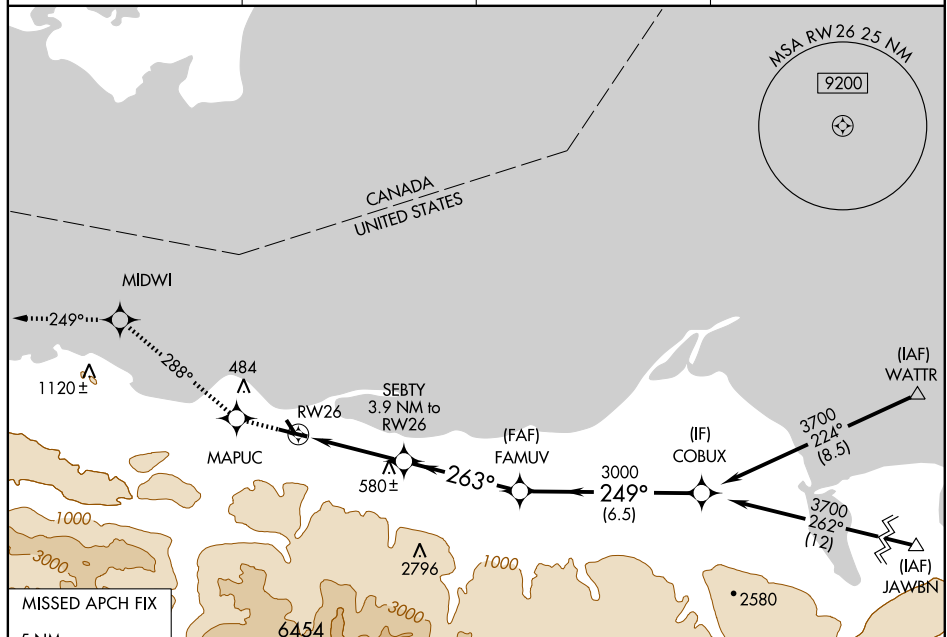
**MISSED APPROACH:** Climb to 5400 direct MAPUC and via track 288° to MIDWI and via track 249° to YUCSU and hold.

ASOS  
**135.175**

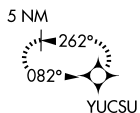
WHIDBEY APP CON ★  
**118.2 285.65**

CLNC DEL  
**124.15**

UNICOM  
**122.975 (CTAF) ①**

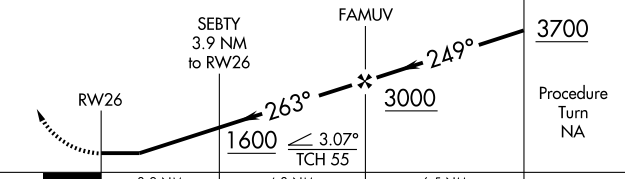
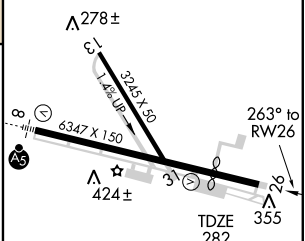


## MISSED APCH FIX



VGSI and descent angles not coincident.

ELEV 291



CATEGORY	A	B	C	D
LNAV MDA	940-1	658 (700-1)	940-1¾ 658 (700-1¾)	940-2 658 (700-1)
CIRCLING	940-1	649 (700-1)	940-1¾ 649 (700-1¾)	940-2 649 (700-2)

LIRL Rwy 13-31  
MIRL Rwy 8-26 ①  
REIL Rwy 26

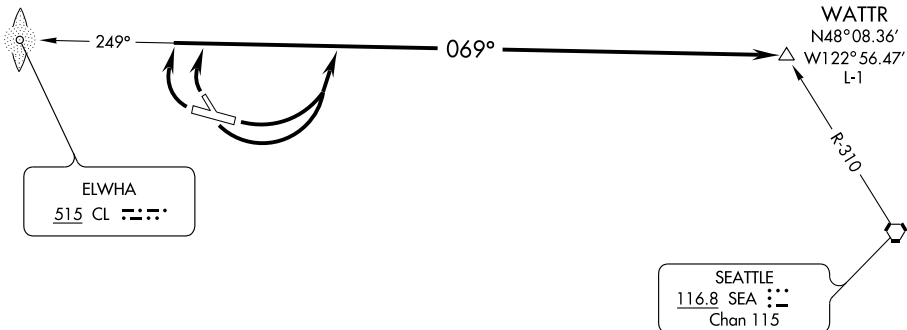


## WATTR FIVE DEPARTURE (OBSTACLE)

PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)  
SL-886 (FAA) PORT ANGELES, WASHINGTONNAS WHIDBEY DEP CON  
118.2 285.65  
SEATTLE RADIO  
122.6  
CTAF 122.975VICTORIA  
113.7 YYJ   
Chan 84  
N48°43.62' - W123°29.06'  
L-1, H-1

## TAKE-OFF OBSTACLE NOTES

- Rwy 13: Multiple trees and pole beginning 1299' from DER, 32' left of centerline, up to 100' AGL/520' MSL.  
Sign 76' from DER, 230' left of centerline, 5' AGL/276' MSL.  
Hangar 1550' from DER, 457' left of centerline, 49' AGL/320' MSL.  
OL on airport beacon 2023' from DER, 829' left of centerline, 74' AGL/345' MSL.  
Multiple trees and pole beginning 614' from DER, 11' right of centerline, up to 100' AGL/599' MSL.
- Rwy 26: Multiple trees beginning 2940' from DER, 747' left of centerline, up to 95' AGL/378' MSL.
- Rwy 31: Multiple trees beginning 470' from DER, 39' left of centerline, up to 71' AGL/298' MSL.  
Multiple trees beginning 640' from DER, 112' right of centerline, up to 63' AGL/290' MSL.
- Rwy 8: Multiple trees and poles beginning 130' from DER, 261' left of centerline, up to 124' AGL/415' MSL.  
Multiple trees and poles beginning 923' from DER, 111' right of centerline, up to 232' AGL/479' MSL.  
Hangar 212' from DER, 523' right of centerline, 19' AGL/310' MSL.



## TAKE-OFF MINIMUMS

- Rwys 26, 31: Standard.  
Rwy 13: Standard with minimum climb of 454' per NM to 1100.  
Rwy 8: 300-1.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8 and 13: Climbing left turn, thence....TAKE-OFF RUNWAYS 26 and 31: Climbing right turn, thence....

....on 069° bearing from CL LOM to WATTR INT, maintain 5400.

**POINT ROBERTS AIRPARK** (1RL) 1 SW UTC-8(-7DT) N48°58.78' W123°04.73'

SEATTLE

10 NOTAM FILE SEA

RWY 16-34: 2265X125 (TURF)

RWY 16: Brush. Rgt tfc.

RWY 34: Brush.

**AIRPORT REMARKS:** Attended Apr-Oct continuously. When able land to the N and depart to the S. Traffic pattern W of fld over water. Noise abatement procedures in effect, contact airport manager for details at 360-945-3139.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**PORT ANGELES** N48°06.99' W123°29.13'

SEATTLE

RCO 122.6 (SEATTLE RADIO)

L-1E

**PORT ANGELES CGAS** (NOW) (KNOW) CG 2 N UTC-8(-7DT) N48°08.49' W123°24.84'

SEATTLE

13 B FUEL J5 NOTAM FILE SEA

L-1E

RWY 07-25: H4500X150 (ASPH) MIRL

IAP, DIAP

**MILITARY SERVICE:** JASU 1(MD-3) FUEL J5. Avbl 1500-0000Z, other times ltd to search and rescue and CG missions. **TRAN ALERT** Tran acft arrive between 1500-0000Z only. Ctc Port Angeles Air on 345.0 or 127.7 15 min prior to ldg.

**MILITARY REMARKS:** RSTD CLOSED to non-CG fixed wing acft. 24 hr PPR C360-417-5840. **CAUTION** 150' twr 75 yards south of rwy, marked by strobe lgt.

**COMMUNICATIONS:** CTAF/UNICOM 122.975

SEATTLE RADIO 122.6

WHIDBEY APP/DEP 118.2 285.65 CLNC DEL 124.15

PORT ANGELES AIR 127.7 345.0

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA

EDIZ HOOK NDB (MHW) 338 K N48°08.39' W123°24.13' at fld. OTS indef.

NDB unusable:

085°-110° byd 20 NM

180°-245° byd 15 NM

110°-140° byd 15 NM

245°-340° byd 10 NM

140°-180° byd 10 NM

**COMM/NAV/WEATHER REMARKS:** Advisory information avbl at Port Angeles Air on prior notice; other CG frequencies avbl on request.

HELIPAD H1: H100X100 (ASPH)

## PORT ANGELES

**WILLIAM R FAIRCHILD INTL** (CLM) 3 NW UTC-8(-7DT) N48°07.21' W123°29.98'

SEATTLE

291 B S4 FUEL 100LL, JET A OX 2 LRA NOTAM FILE CLM

H-1B, L-1E

RWY 08-26: H6347X150 (ASPH-GRVD) S-55, D-66, 2S-83, 2D-115 MIRL

IAP

RWY 08: MALSR. VASI(V4L)—GA 3.0° TCH 47'. Trees.

RWY 26: REIL. SAVASI(S2L)—GA 4.0° TCH 49'. Thld dspcd 1354'.

Antenna. Rgt tfc.

RWY 13-31: H3245X50 (ASPH) S-30 LIRL 1.4% up SE

RWY 13: Trees. RWY 31: Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended 1500-0100Z. For after hours Jet A call 360-452-6206. Rwy 13-31 CLOSED SS to SR. Waterfowl and birds on and invof arpt. Increased bird activity due to waste landfill located ½ mile northwest AER 08. No air carrier ops. Arpt surrendered arpt opr certificate 12/9/05. **ACTIVATE** MIRL Rwy 08-26 and MALSR Rwy 08—CTAF.

**WEATHER DATA SOURCES:** ASOS 135.175 (360) 457-1070.

**COMMUNICATIONS:** CTAF/UNICOM 122.975

PORT ANGELES RCO 122.6 (SEATTLE RADIO)

Ⓡ WHIDBEY APP/DEP CON 118.2 CLNC DEL 124.15

**AIRSPACE:** CLASS E svc 1300-0730Z other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA.

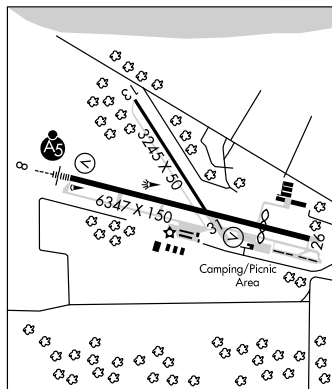
TATOOSH (H) VORTACW 112.2 TOU Chan 59 N48°17.99'

W124°37.62' 081° 46.5 NM to fld. 1652/22E. HIWAS.

ELWHA NDB (MHW/LOM) 515 CL N48°09.01' W123°40.22' 083° 7.1 NM to fld. NOTAM FILE CLM.

NDB unusable 100°-235° beyond 12 NM.

ILS 108.9 I-CLM Rwy 08. Class IA. LOM ELWHA NDB. Localizer unusable inside thld.



**PORT OF ILWACO** (See ILWACO)

**PORT OF POULSBORO MARINA MOORAGE SPB** (See POULSBORO)

NDB K <b>338</b>	APP CRS <b>237°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>13</b>
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# COPTER NDB or GPS 237°

PORT ANGELES CGAS (NOW)



Prior permission required.

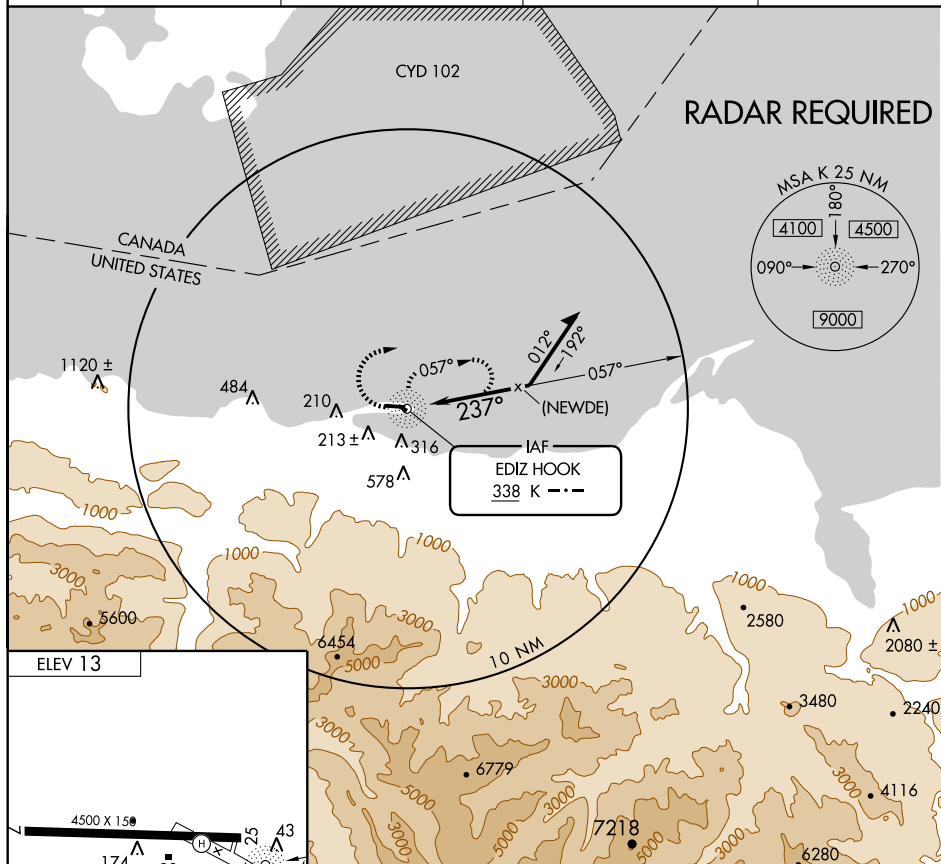
MISSED APPROACH: Climbing right turn to 1600 via bearing 057° from Ediz Hook NDB, then climbing left turn to 3000 direct Ediz Hook NDB and hold.

WHIDBEY APP CON  
**118.2 285.65**

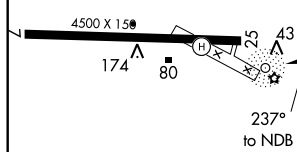
PORT ANGELES AIR  
**127.7 345.0**

CLINC DEL  
**124.15**




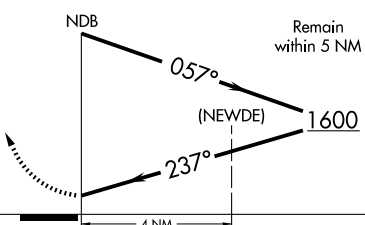
UNICOM  
**122.975 (CTAF)**



ELEV 13



MRL Rwy 7-25

<div>1600</div> <div></div>		<div>3000</div> <div></div>	<div>K</div> <div></div>	<div>NDB</div> <div></div> <div>Remain within 5 NM</div>		
CATEGORY	A	B	C	D		
H-237°	540- $\frac{3}{4}$ 527 (600- $\frac{3}{4}$ )	NA				

**PULLMAN/MOSCOW, ID**  
**PULLMAN/MOSCOW RGNL**

(PUW) 3 NE UTC-8(-7DT) N46°44.63' W117°06.58'

2556 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE PUW

RWY 05-23: H6730X100 (ASPH) S-57, D-75, 2S-95, 2D-135 HIRL

RWY 05: REIL. PAPI(P2L)—GA 3.0° TCH 55'. Thld displcd 290'.

Fence.

RWY 23: REIL. PAPI(P4L)—GA 4.0° TCH 60'. Thld displcd 801'.

Ground.

**RUNWAY DECLARED DISTANCE INFORMATION:**

RWY 05: TORA-6730 TODA-6730 ASDA-6490 LDA-6200

RWY 23: TORA-6730 TODA-6730 ASDA-6040 LDA-5240

**AIRPORT REMARKS:** Attended 1600-0200Z. CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR call arpt manager 509-338-3223. Non-paved areas soft. Acft must delay taxiing and remain behind the intermediate holding position line when large acft ops are in progress. No parking between rwy and taxiway and within 30' of taxiway to the north west. ACTIVATE HIRL Rwy 05-23, and REIL Rwy 05 and Rwy 23—CTAF. Landing fee for all commercial acft.

**WEATHER DATA SOURCES:** ASOS 135.675 (509)334-3222. HIWAS 109.0 PUW.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

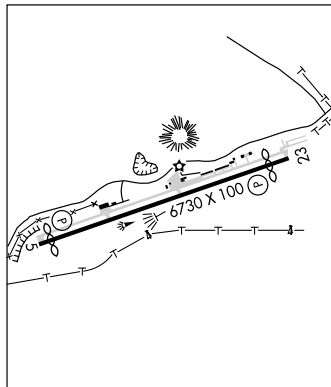
RCO 122.6 (SEATTLE RADIO)

SEATTLE CENTER APP/DEP CON 123.95

**AIRSPACE:** CLASS E svc Mon-Fri 1400-0600Z, Sat 1700-0000Z, Sun 1900-0600Z other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE PUW.

(L) VORW/DME 109.0 PUW Chan 27 N46°40.46' W117°13.41' 028° 6.3 NM to fld. 2720/20E. HIWAS.

DME unmonitored.

**PUYALLUP****PIERCE CO-THUN FLD** (PLU) 5 S UTC-8(-7DT) N47°06.24' W122°17.23'

538 B S4 FUEL 100LL OX 4 TPA-1538(1000) NOTAM FILE PLU

RWY 16-34: H3650X60 (ASPH) MIRL

RWY 16: REIL. PAPI(P4L)—GA 4.0° TCH 53'. Trees.

RWY 34: REIL. PAPI(P4R)—GA 4.0° TCH 53'. Road.

**AIRPORT REMARKS:** Attended 1600Z—dusk. Fuel avbl 24 hours with credit card. Ultralights prohibited. Noise sensitive all quadrants.

**WEATHER DATA SOURCES:** AWOS-3 128.575 (253) 848-2748.**COMMUNICATIONS:** CTAF/UNICOM 122.7

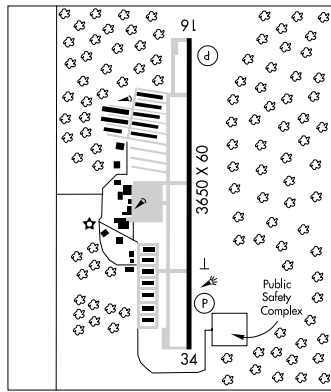
SEATTLE APP/DEP CON 126.5 CLNC DEL 121.85

**RADIO AIDS TO NAVIGATION:** NOTAM FILE TCM.

McCHORD (T) VORTAC 109.6 TCM Chan 33 N47°08.86'

W122°28.50' 087° 8.1 NM to fld. 284/22E. No NOTAM MP

Tue, Thu 0700-1600Z.



SEATTLE

L-1D

IAP

WAAS Chan <b>50129</b> W05A	APP CRS <b>051°</b>	Rwy Idg <b>6200</b> TDZE <b>2540</b> Apt Elev <b>2556</b>
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# RNAV (GPS) RWY 5

PULLMAN/MOSCOW RGNL (PUW)

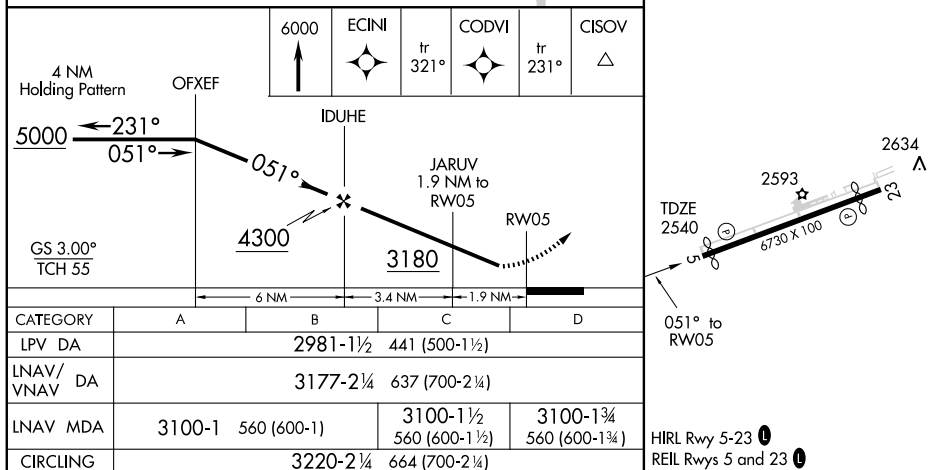
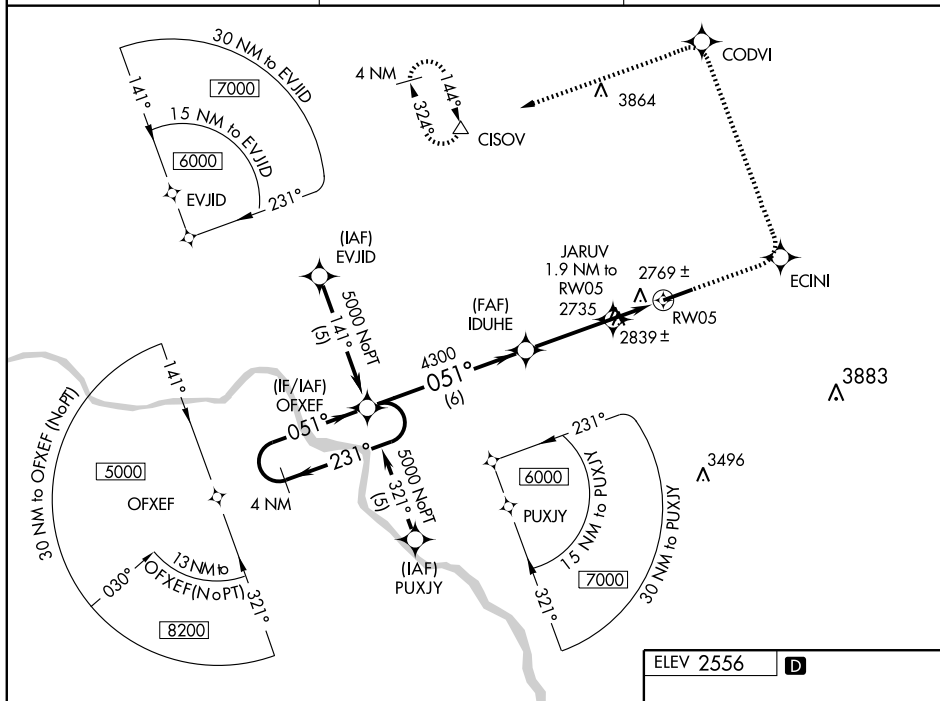
▼ DME/DME RNP-0.3 NA.  
▲ Baro VNAV NA below -20°C (-4°F).

MISSED APPROACH: Climb to 6000 direct ECINI, and via 321° track to CODVI and via 231° track to CISOV and hold.

ASOS  
**135.675**

SEATTLE CENTER  
**123.95 290.55**

UNICOM  
**122.8 (CTAF) 0**



APP CRS	Rwy Idg	<b>5240</b>
<b>246°</b>	TDZE	<b>2549</b>
	Apt Elev	<b>2556</b>

# RNAV (GPS) RWY 23

## PULLMAN/MOSCOW RGNL (PUW)

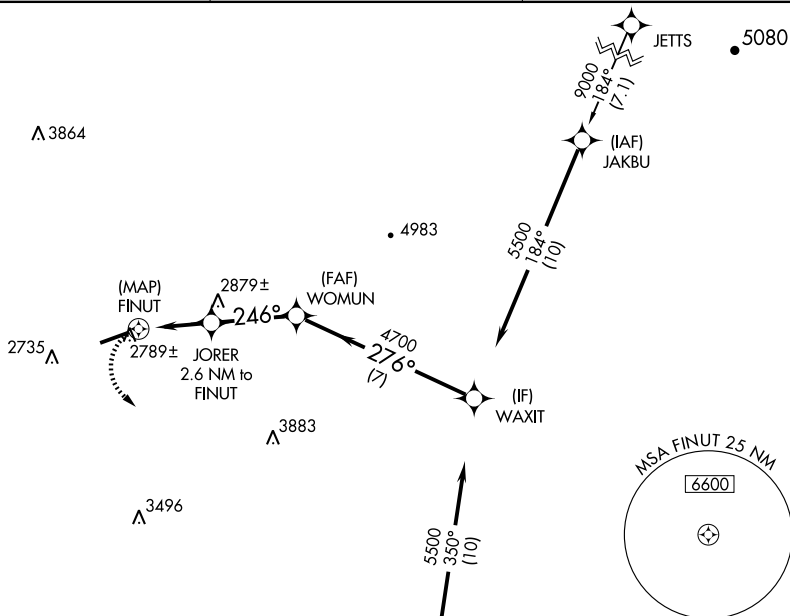
**▼** DME/DME RNP-0.3 NA.  
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 6000 direct CESIN and hold.

ASOS  
**135.675**

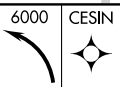
SEATTLE CENTER  
**123.95 290.55**

UNICOM  
**122.8 (CTAF) 0**

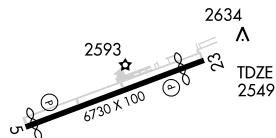


ELEV 2556

**D**



CATEGORY	A	B	C	D
LNAV MDA	3180-1 631 (700-1)	631 (700-1)	3180-1¾ 631 (700-1¾)	3180-2 631 (700-2)
CIRCLING	3220-1 664 (700-1)	664 (700-1)	3220-1¾ 664 (700-1¾)	3220-2 664 (700-2)



HIRL Rwy 5-23 0  
REIL Rwy 5 and 23 0

VOR/DME PUW <b>109.0</b> Chan <b>27</b>	APP CRS <b>026°</b>	Rwy Idg TDZE Apt Elev	<b>6200</b> <b>2540</b> <b>2556</b>
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VOR RWY 5  
PULLMAN/MOSCOW RGNL (PUW)

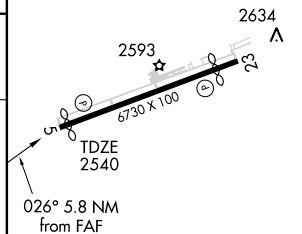
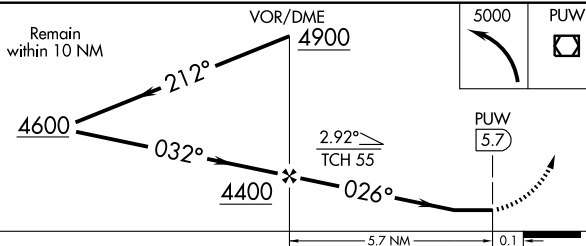
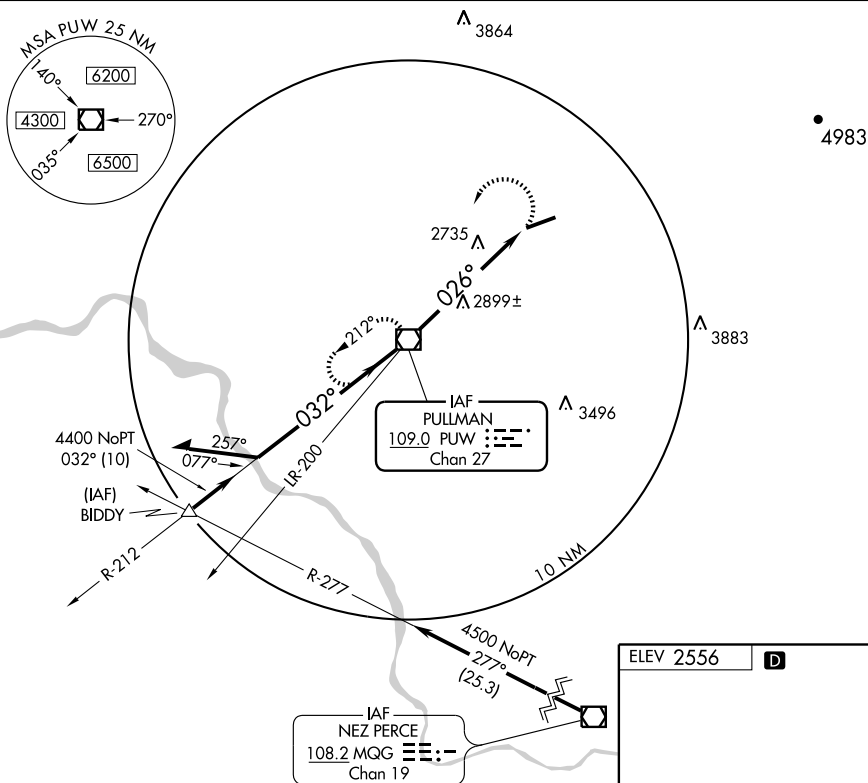
**T** When VGSI inoperative, circling Rwy 5 NA at night.  
Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climbing left turn to 5000 direct PUW  
VOR/DME and hold.

ASOS  
135,675

SEATTLE CENTER  
123.95 290.55

UNICOM  
122.8 (CTAF) **L**



CATEGORY	A	B	C	D
S-5	3120-1	580 (600-1)	3120-1½ 580 (600-1½)	3120-1¾ 580 (600-1¾)
CIRCLING	3220-1	664 (700-1)	3220-1¾ 664 (700-1¾)	3220-2 664 (700-2)

HIRL Rwy 5-23 <b>L</b>					
REIL Rws 5 and 23 <b>L</b>					
FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

PULLMAN/MOSCOW, WASHINGTON

Amdt 8A 10210

PULLMAN/MOSCOW RGNL (PUW)

VOR RWY 5

46°45'N-117°-07'W

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

**PULLMAN/MOSCOW, ID**  
**PULLMAN/MOSCOW RGNL**

(PUW) 3 NE UTC-8(-7DT) N46°44.63' W117°06.58'  
 2556 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE PUW  
 RWY 05-23: H6730X100 (ASPH) S-57, D-75, 2S-95, 2D-135 HIRL

RWY 05: REIL. PAPI(P2L)—GA 3.0° TCH 55'. Thld displcd 290'.  
 Fence.

RWY 23: REIL. PAPI(P4L)—GA 4.0° TCH 60'. Thld displcd 801'.  
 Ground.

**RUNWAY DECLARED DISTANCE INFORMATION:**

RWY 05: TORA-6730 TODA-6730 ASDA-6490 LDA-6200

RWY 23: TORA-6730 TODA-6730 ASDA-6040 LDA-5240

**AIRPORT REMARKS:** Attended 1600-0200Z. CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR call arpt manager 509-338-3223. Non-paved areas soft. Acft must delay taxiing and remain behind the intermediate holding position line when large acft ops are in progress. No parking between rwy and taxiway and within 30' of taxiway to the north west. ACTIVATE HIRL Rwy 05-23, and REIL Rwy 05 and Rwy 23—CTAF. Landing fee for all commercial acft.

**WEATHER DATA SOURCES:** ASOS 135.675 (509)334-3222. HIWAS 109.0 PUW.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

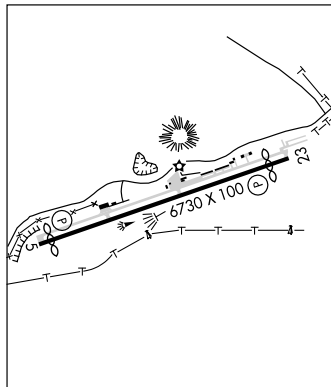
RCO 122.6 (SEATTLE RADIO)

SEATTLE CENTER APP/DEP CON 123.95

**AIRSPACE:** CLASS E svc Mon-Fri 1400-0600Z, Sat 1700-0000Z, Sun 1900-0600Z other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PUW.

(L) VORW/DME 109.0 PUW Chan 27 N46°40.46' W117°13.41' 028° 6.3 NM to fld. 2720/20E. HIWAS.  
 DME unmonitored.

**PUYALLUP**

**PIERCE CO-THUN FLD** (PLU) 5 S UTC-8(-7DT) N47°06.24' W122°17.23'

538 B S4 FUEL 100LL OX 4 TPA-1538(1000) NOTAM FILE PLU

RWY 16-34: H3650X60 (ASPH) MIRL

RWY 16: REIL. PAPI(P4L)—GA 4.0° TCH 53'. Trees.

RWY 34: REIL. PAPI(P4R)—GA 4.0° TCH 53'. Road.

**AIRPORT REMARKS:** Attended 1600Z—dusk. Fuel avbl 24 hours with credit card. Ultralights prohibited. Noise sensitive all quadrants.

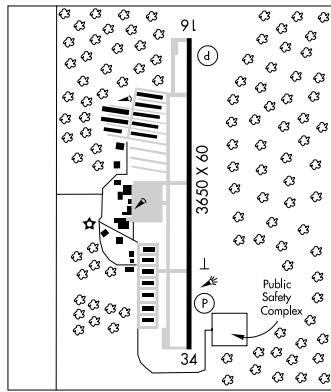
**WEATHER DATA SOURCES:** AWOS-3 128.575 (253) 848-2748.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

SEATTLE APP/DEP CON 126.5 CLNC DEL 121.85

**RADIO AIDS TO NAVIGATION:** NOTAM FILE TCM.

McCHORD (T) VORTAC 109.6 TCM Chan 33 N47°08.86' W122°28.50' 087° 8.1 NM to fld. 284/22E. No NOTAM MP  
 Tue, Thu 0700-1600Z.



**SEATTLE**  
 L-1D  
 IAP



APP CRS  
342°

Rwy Idg	<b>3650</b>
TDZE	<b>538</b>
Apt Elev	<b>538</b>

# GPS RWY 34

PUYALLUP / PIERCE COUNTY-THUN FIELD (PLU)

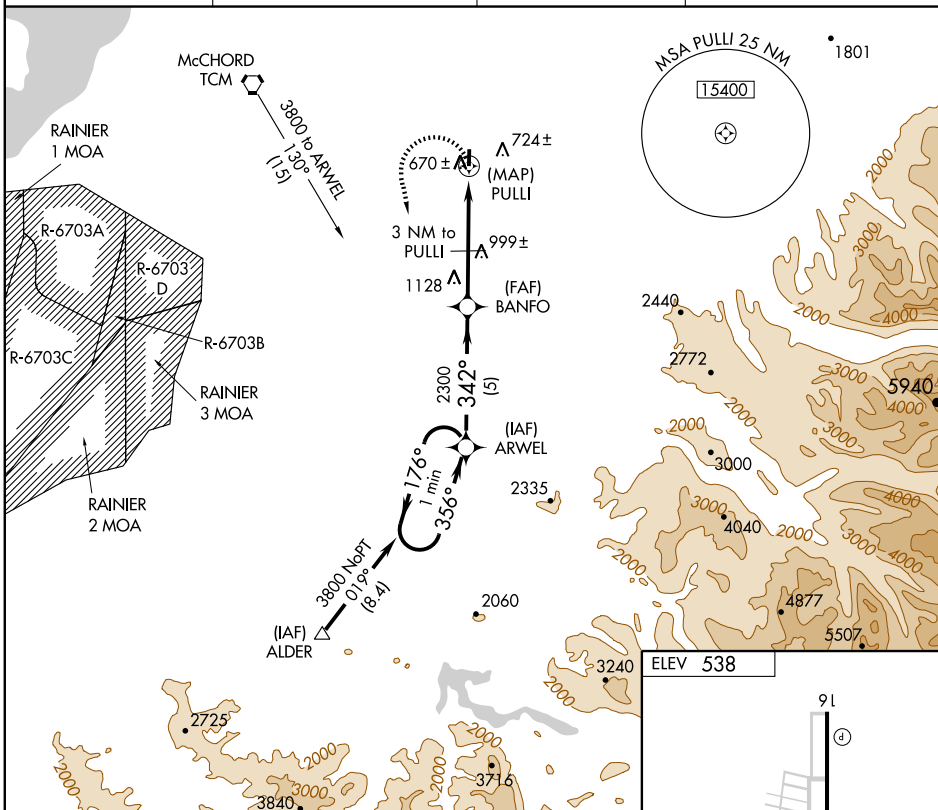


**A NA**

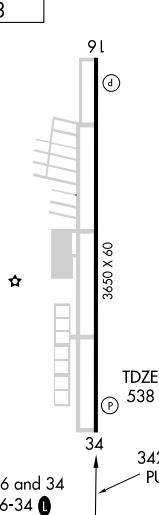
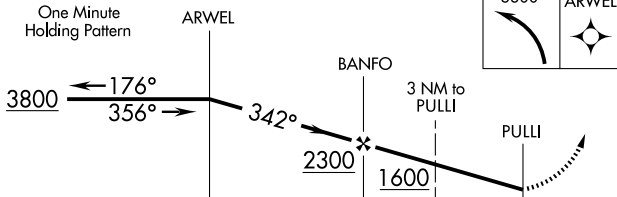
MISSED APPROACH: Climbing left turn to 3800 direct ARWEL WP and hold.

AWOS-3  
**128.575**

SEATTLE APP CON  
126.5 377.15

CLNC DEL  
**121.85**UNICOM  
122.7 (CTAF) **L**

## One Minute Holding Pattern



CATEGORY	A	B	C	D
S-34	1200-1	662 (700-1)	NA	
CIRCLING	1200-1	662 (700-1)	NA	

REIL Rwy 16 and 34  
MIRL Rwy 16-34 **L**

10210

## AIRPORT DIAGRAM

AL-5396 (FAA)

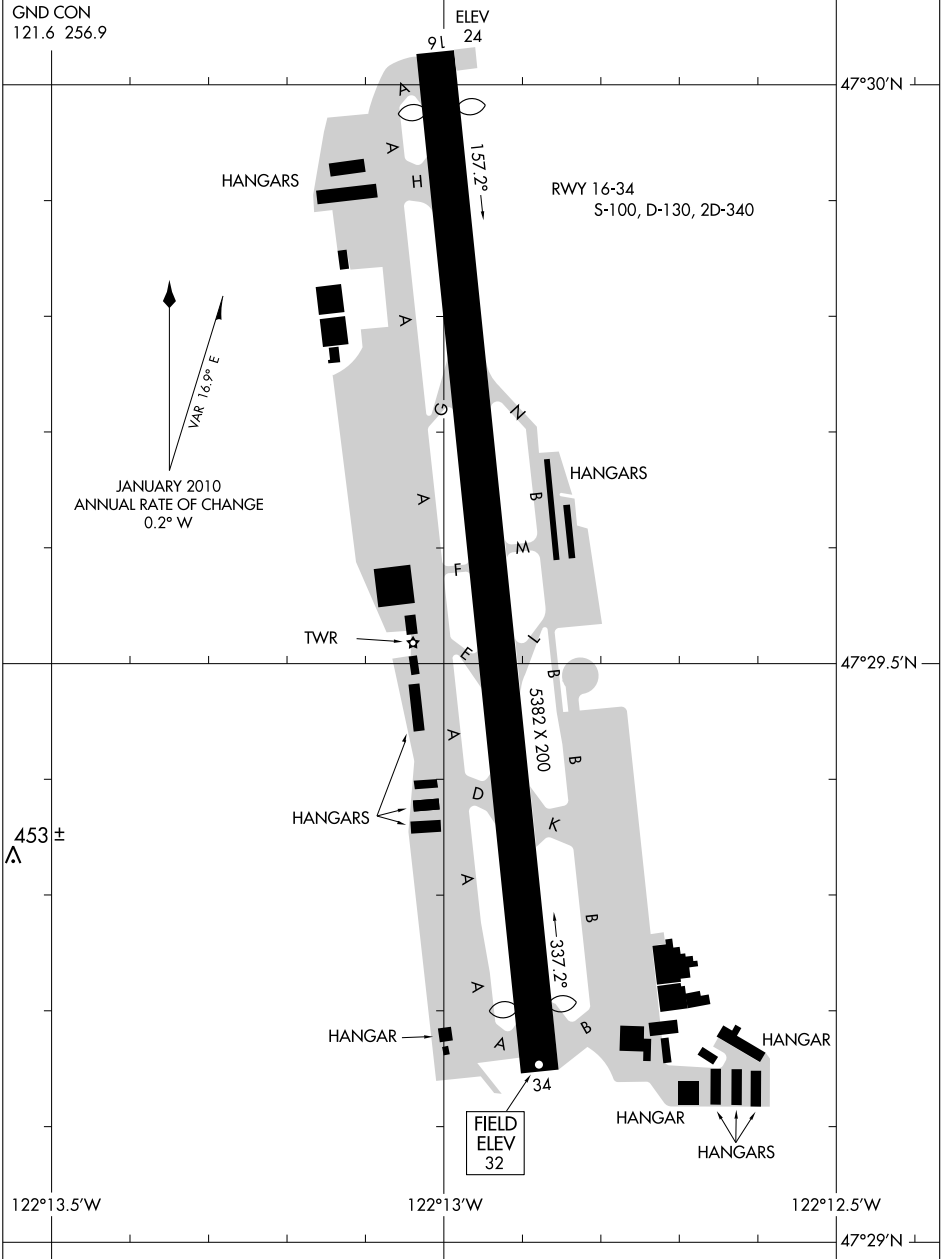
RENTON MUNI (R.NT)  
RENTON, WASHINGTON

ATIS  
126.95  
RENTON TOWER ★  
124.7 256.9  
GND CON  
121.6 256.9

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010



## AIRPORT DIAGRAM

RENTON, WASHINGTON  
RENTON MUNI (R.NT)

10210

## RENTON

**RENTON MUNI** (RNT) 0 NW UTC-8(-7DT) N47°29.59' W122°12.95'

SEATTLE

32 B S4 FUEL 100LL, JET A1+ OX 1, 2 TPA—See Remarks LRA NOTAM FILE RNT  
 RWY 16-34: H5382X200 (ASPH-CONC-GRVD) S-100, D-130, 2D-340 MIRL (NSTD)

H-1B, L-1D  
 IAP, AD

RWY 16: REIL. PAPI(P2L)—GA 3.0° TCH 50'. Thld dsplcd 300'.

Trees.

RWY 34: REIL. PAPI(P2L)—GA 3.75° TCH 59'. Thld dsplcd 340'.  
 Road. Rgt tfc.

**AIRPORT REMARKS:** Attended 1500Z†—Dusk. Acft requiring svcs ctc 122.85 or 122.95. Numerous flocks of birds invof arpt and along Lake Washington shoreline at all times. Rwy 34 20' blast fence 190' from end of rwy. Be alert for Boeing production acft being towed across the rwy during hours twr closed. Seaplane base NW corner of arpt. TPA-1032(1000). TPA west of the fld is 1218' AGL due to terrain immediately west of the arpt. West twy closed to acft with wing span 118' or over. Noise abatement procedures in effect ctc arpt manager 425-430-7471. Rwy 16-34 NSTD MIRL, 340' SE end unlit. ACTIVATE MIRL Rwy 16-34, REIL Rwy 16 and Rwy 34 and twy lgts—CTAF. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** ASOS (425) 255-6080. LAWRS.

**COMMUNICATIONS:** CTAF 124.7 ATIS 126.95 UNICOM 122.95

Ⓡ SEATTLE APP/DEP CON 119.2 (076°-160° Rwy 16) (341°-075°) 120.1

(199°-300°) 120.4 (301°-340° Rwy 34) 125.9 (076°-160° Rwy 34) (301°-340° Rwy 16) 126.5 (161°-198°)

TOWER 124.7 (Oct 1-Apr 30 1500-0400Z†, May 1-Sep 30 1500-0500Z†) GND CON 121.6

**AIRSPACE:** CLASS D svc Oct 1-Apr 30 1500-0400Z†, May 1-Sep 30 1500-0500Z† other times CLASS G.

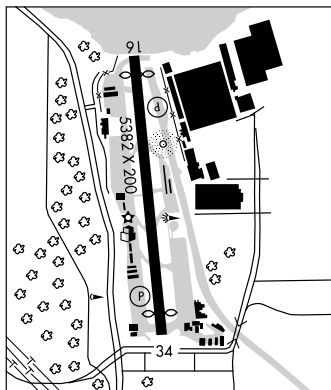
**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA.

SEATTLE (H) VORTACW 116.8 SEA Chan 115 N47°26.12' W122°18.58' 029° 5.2 NM to fld. 354/19E.

NDB (MHW) 353 RNT N47°29.73' W122°12.88' at fld. NOTAM FILE RNT.

NDB unusable 035°-085° beyond 20 NM.

**COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.



**WILL ROGERS WILEY POST MEM SPB** (W36) 1 N UTC-8(-7DT) N47°29.99' W122°13.16'

SEATTLE

14 S4 FUEL 100LL, JET A, JET A1+ OX 1, 2 LRA NOTAM FILE RNT

**WATERWAY 12-30:** 5000X200 (WATER)

**WATERWAY 12:** Rgt tfc

**SEAPLANE REMARKS:** Attended 1500Z†—Dusk. Ctc Renton twr when operating, for tfc data. When twr not operating announce intentions on 124.7. When flying inbound or outbound in the west channel waterway above 800' AGL ctc Boeing twr freq 118.3 for traffic advisories. Flocks of waterfowl in vicinity, CAUTION advised lgds and takeoffs. Extensive boating and personal watercraft in vicinity. Flight Notification Service (ADCUS) available.

**COMMUNICATIONS:** CTAF 124.7 UNICOM 122.8

## REPUBLIC

**FERRY CO** (R49) 6 NE UTC-8(-7DT) N48°43.09' W118°39.39'

SEATTLE

2522 B TPA—3322(800) NOTAM FILE SEA

L-13A

RWY 17-35: H3498X60 (ASPH) MIRL

RWY 17: REIL. Tree. Rgt tfc.

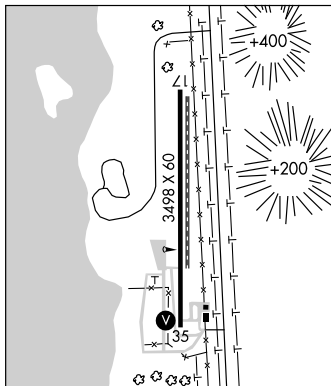
RWY 35: REIL. VASI(V2L)—GA 4.0° TCH 23'. Trees.

**AIRPORT REMARKS:** Unattended. Suggest ngt lgds be made on Rwy 35. Rwy 17-35 trees located on unlgtd unmarked mountainous terrain. P-lines NE of Rwy 17 lgtd dusk-dawn. ACTIVATE MIRL Rwy 17-35 and VASI Rwy 35, REIL Rwy 17 and Rwy 35—122.8.

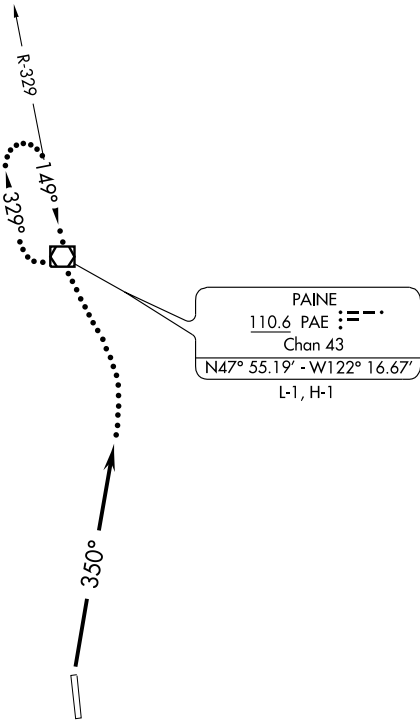
**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE EPH.

EPHRATA (H) VORTACW 112.6 EPH Chan 73 N47°22.68' W119°25.44' 360° 86.2 NM to fld. 1250/21E.



ATIS 126.95  
GND CON  
121.6 256.9  
RENTON TOWER ★  
124.7 (CTAF) 256.9  
SEATTLE DEP CON  
119.2 284.7



NOTE: RADAR required.

TAKE-OFF MINIMUMS

Rwy 16: NA- ATC.  
Rwy 34: Standard with minimum climb of 315' per NM to 800.

TAKE-OFF OBSTACLE NOTES

Rwy 34: Trees and terrain beginning 1.6 NM from DER, 104' left of centerline, up to 100' AGL/485' MSL, wood piling, trees and terrain beginning 75' from DER, 7' right of centerline, up to 100' AGL/426' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RUNWAY 34:** Climb heading 350°, maintain 3000, expect radar vectors, expect filed altitude within 5 minutes after departure.

**LOST COMMUNICATIONS:** If no contact with Seattle Departure Control within 3 minutes after departure, climbing left turn direct PAE VOR/DME, continue climb-in PAE VOR/DME holding pattern to cross PAE VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

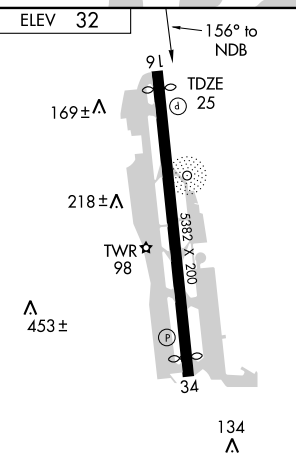
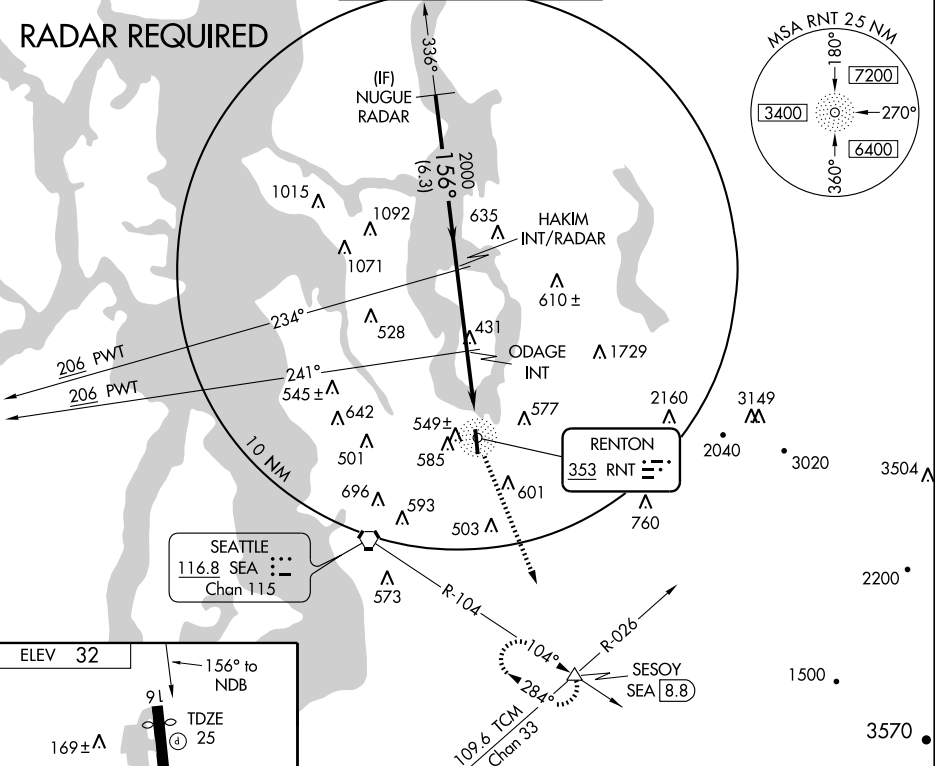
NDB RNT <b>353</b>	APP CRS <b>156°</b>	Rwy Idg TDZE Apt Elev	<b>5082</b> <b>25</b> <b>32</b>
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# NDB RWY 16 RENTON MUNI (RNT)

**⚠** Circling NA W of Rwy 16-34. Visibility reduction by helicopters NA. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting.

**MISSED APPROACH:** Climb to 5000 via 141° bearing from RNT NDB and SEA VORTAC R-104 to SESOY INT and hold, continue climb-in-hold to 5000.

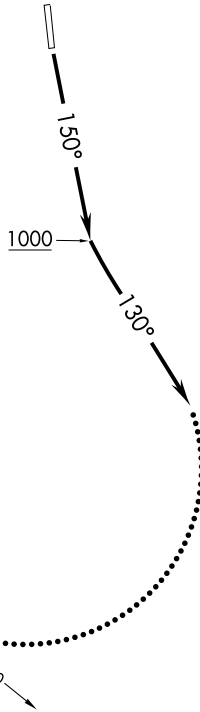
ATIS <b>126.95</b>	SEATTLE APP CON <b>119.2 284.7</b>	RENTON TOWER★ <b>124.7 (CTAF) 0 256.9</b>	GND CON <b>121.6 256.9</b>	UNICOM <b>122.95</b>
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	NUGUE RADAR	HAKIM INT/RADAR	ODAGE INT	5000 RNT 141° NDB	SEA R-104	SESOY △
	2000	2000	1000			
	6.3 NM	2.9 NM	2.8 NM	0.3		
CATEGORY	A	B	C	D		
S-16	1000-1¼ 975 (1000-1¼)	1000-1½ 975 (1000-1½)	1000-3	975 (1000-3)		
CIRCLING	1000-1¼ 968 (1000-1¼)	1000-1½ 968 (1000-1½)	1000-3	968 (1000-3)		
ODAGE FIX MINIMUMS (DUAL ADF RECEIVERS REQUIRED)						
S-16	900-1 875 (900-1)	900-1¼ 875 (900-1¼)	900-2½ 875 (900-2½)	900-2¾ 875 (900-2¾)		
CIRCLING	900-1 868 (900-1)	900-1¼ 868 (900-1¼)	920-2¾ 888 (900-2¾)	920-3 888 (900-3)		

ATIS 126.95  
GND CON  
121.6 256.9  
RENTON TOWER ★  
124.7 (CTAF) 256.9  
SEATTLE DEP CON  
119.2 284.7

SEATTLE  
116.8 SEA  
Chan 115  
N47°26.12' - W122°18.58'  
L-1, H-1



NOTE: RADAR required.

TAKE-OFF MINIMUMS

Rwy 16: Standard with a minimum climb of 405' per NM to 800.  
Rwy 34: NA- ATC.

TAKE-OFF OBSTACLE NOTES

Rwy 16: Trees, towers, lights and blast shield beginning 186' from DER, 4' left of centerline, up to 100' AGL/574' MSL. Trees, lights and signs beginning 40' from DER, 54' right of centerline, up to 100' AGL/297' MSL.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb heading 150° to 1000, then climbing left turn heading 130°, expect radar vectors, maintain 3000, expect filed altitude within 5 minutes after departure.

LOST COMMUNICATIONS: If no contact with Seattle Departure Control within 3 minutes after departure, climbing right turn direct SEA VORTAC, continue climb-in SEA VORTAC holding pattern to cross SEA VORTAC at or above MEA/MCA for direction of flight before proceeding on course.

APP CRS  
**157°**

Rwy Idg **5082**  
TDZE **25**  
Apt Elev **32**

# RNAV (GPS) Y RWY 16

RENTON MUNI (RNT)

**▼** Circling NA W of Rwy 16-34. DME/DME RNP: 0.3 NA.  
**▲** Visibility reduction by helicopters NA. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting.

MISSED APPROACH: Climb to 5000 direct CUPAT and via track 107° to SESOY and hold, continue climb-in-hold to 5000.

ATIS  
**126.95**

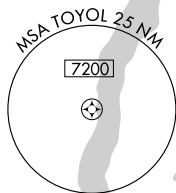
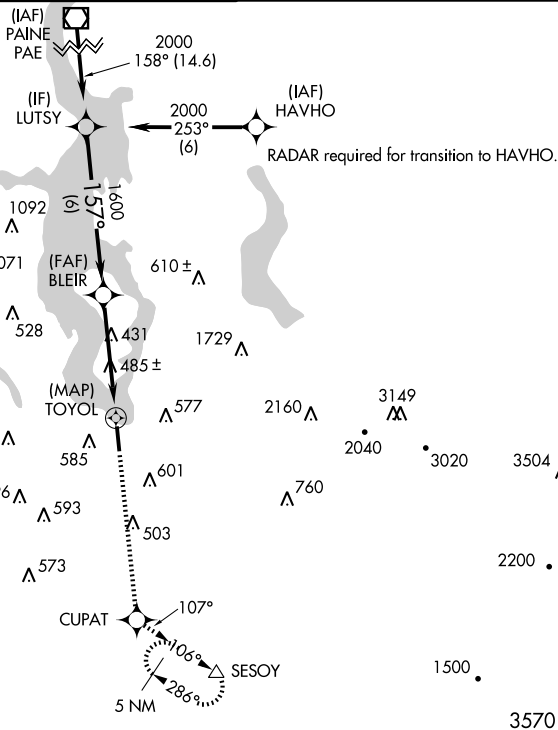
SEATTLE APP CON  
**119.2 284.7**

RENTON TOWER★  
**124.7 (CTAF) 0 256.9**

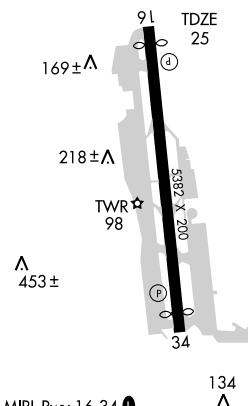
GND CON  
**121.6 256.9**

UNICOM  
**122.95**

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.



ELEV 32



MIRL Rwy 16-34  
REIL Rws 16 and 34

	LUTSY		BLEIR		TOYOL	
	2000		1600		1.8 NM to TOYOL	
Procedure Turn NA	157°		1600		3.04° TCH 50	
	6 NM		2.6 NM		1.8	
					0.3	
CATEGORY	A		B		C	
LNAV MDA	760-1		735 (800-1)		760-2	
					735 (800-2)	
					760-2½	
					735 (800-2½)	
CIRCLING	880-1		880-1¼		920-2¾	
	848 (900-1)		848 (900-1¼)		888 (900-2¾)	
					920-3	
					888 (900-3)	

WAAS CH <b>93610</b> <b>W16A</b>	APP CRS <b>157°</b>	Rwy Idg TDZE <b>25</b> Apt Elev <b>32</b>
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# RNAV (GPS) Z RWY 16

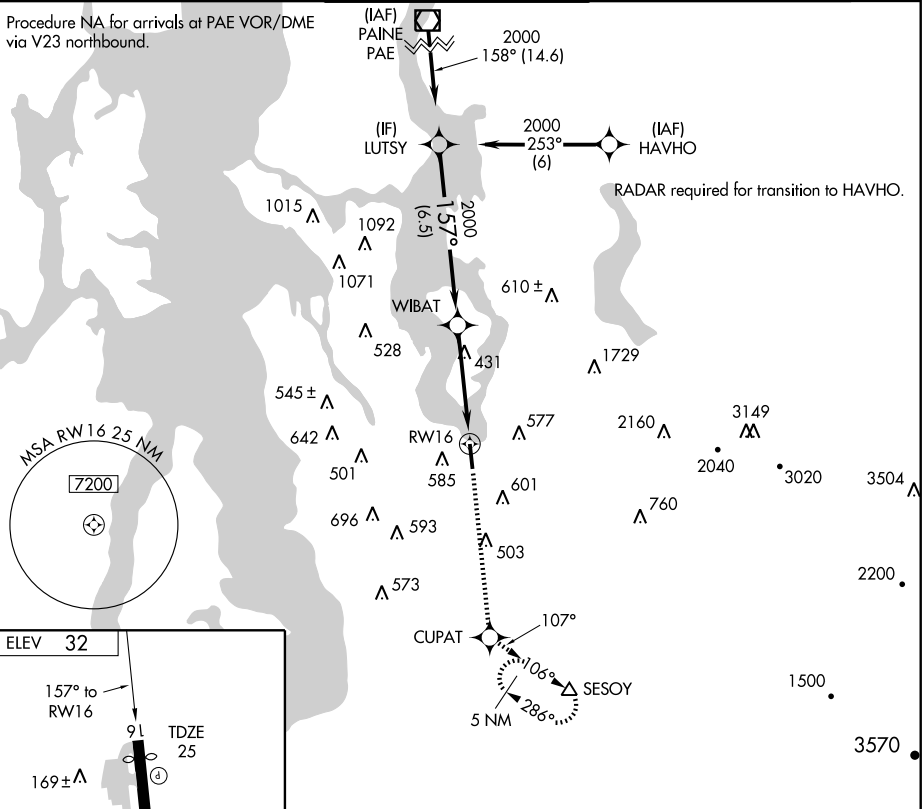
RENTON MUNI (RNT)

**▼** DME/DME RNP- 0.3 NA. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting.

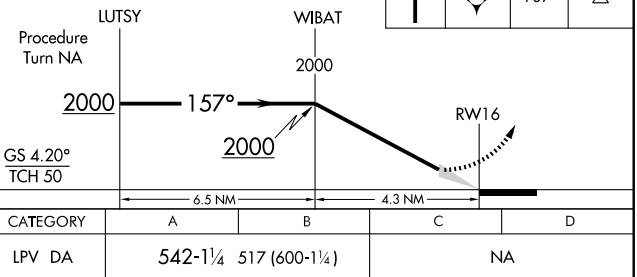
MISSED APPROACH: Climb to 5000 direct CUPAT and via track 107° to SESOY and hold, continue climb-in-hold to 5000.

ATIS <b>126.95</b>	SEATTLE APP CON <b>119.2 284.7</b>	RENTON TOWER★ <b>124.7 (CTAF) 0 256.9</b>	GND CON <b>121.6 256.9</b>	UNICOM <b>122.95</b>
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Procedure NA for arrivals at PAE VOR/DME via V23 northbound.



VGSI and RNAV glidepath not coincident.





**RIBOO** N46°22.23' W119°15.55'. NOTAM FILE SEA.  
**NDB (LOM)** 260 RL 186° 4.3 NM to Richland. LOM unmonitored when PASCO twr clsd.

SEATTLE

**RICHLAND** (RLD) 2 NW UTC-8(-7DT) N46°18.34' W119°18.25'  
 394 B S2 FUEL 100LL, JET A TPA-1194(800) NOTAM FILE RLD

SEATTLE

L-13A

IAP

**RWY 01-19:** H4009X75 (ASPH) S-30, D-45, 2D-70 MIRL  
**RWY 01:** REIL. PAPI(P2L)-GA 3.0° TCH 30'. Antenna.  
**RWY 19:** MALS. REIL. PAPI(P2L)-GA 3.0° TCH 30'. Pole. Rgt tfc.  
**RWY 08-26:** H3995X100 (ASPH) S-30, D-45, 2D-70 MIRL  
**RWY 08:** ODALS. PAPI(P2L) GA 3.0° TCH 40'. Ground.  
**RWY 26:** VASI(V4L)-GA 3.0° TCH 50'. Railroad. Rgt tfc.

**AIRPORT REMARKS:** Attended 1600-0200Z±. Parachute Jumping.  
 CAUTION: Road 550' west of approach end of Rwy 08. Rwy 08  
 CLOSED nights to Part 135 operations. ACTIVATE MIRL Rwy  
 01-19, REIL Rwy 01 and Rwy 19, MALS Rwy 19 and ODALS Rwy  
 08-CTAF. VASI Rwy 26 and PAPI Rwy 01, Rwy 08 and Rwy 19 opr  
 24 hrs.

**WEATHER DATA SOURCES:** AWOS-3 132.675 (509) 375-4247.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓡ **CHINOOK APP/DEP CON** 128.75 (1400-0600Z±).

Ⓡ **SEATTLE APP/DEP CON** 132.6 (0600-1400Z±).

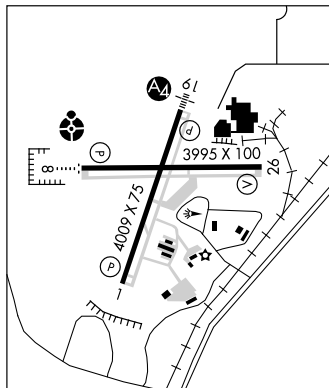
**RADIO AIDS TO NAVIGATION:** NOTAM FILE PSC.

**PASCO (L) VOR/DME** 108.4 PSC Chan 21 N46°15.78'  
 W119°06.94' 268° 8.3 NM to fld. 400/20E.

**RIBOO NDB (LOM)** 260 RL N46°22.23' W119°15.55' 186°  
 4.3 NM to fld. LOM unmonitored when PASCO twr clsd.

**ILS/DME** 110.5 I-RLD Chan 42 Rwy 19 Localizer only. LOM RIBOO NDB. Unmonitored when PASCO  
 twr clsd.

**COMM/NAV/WEATHER REMARKS:** CLNC DEL provided by SEATTLE Radio on 122.4.



## RIMROCK

**TIETON STATE** (4S6) 2 S UTC-8(-7DT) N46°38.25' W121°07.44'

SEATTLE

2964 NOTAM FILE SEA

**RWY 02-20:** 2509X140 (TURF)

**RWY 02:** Trees. **RWY 20:** Trees.

**AIRPORT REMARKS:** Unattended. CLOSED 1 Oct-1 June. Rwy 02 obstructed by mountains at 1000'. Rwy 20 obstructed  
 by mountains at 1000'. Pedestrians, vehicles and wildlife on and invof arpt. Rwy 02-20 surface rough. Ctc  
 Washington State Aviation Division 360-651-6300 or for Washington only 1-800-552-0666 for facility  
 information prior to use.

**COMMUNICATIONS:** CTAF 122.9

**RITTS** N48°03.17' W122°17.33'. NOTAM FILE PAE.

SEATTLE

**NDB (LOM)** 396 PA 158° 8.8 NM to Snohomish Co (Paine Fld).

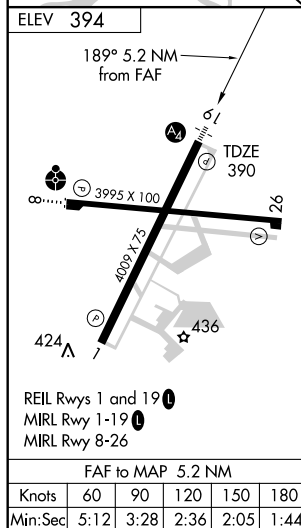
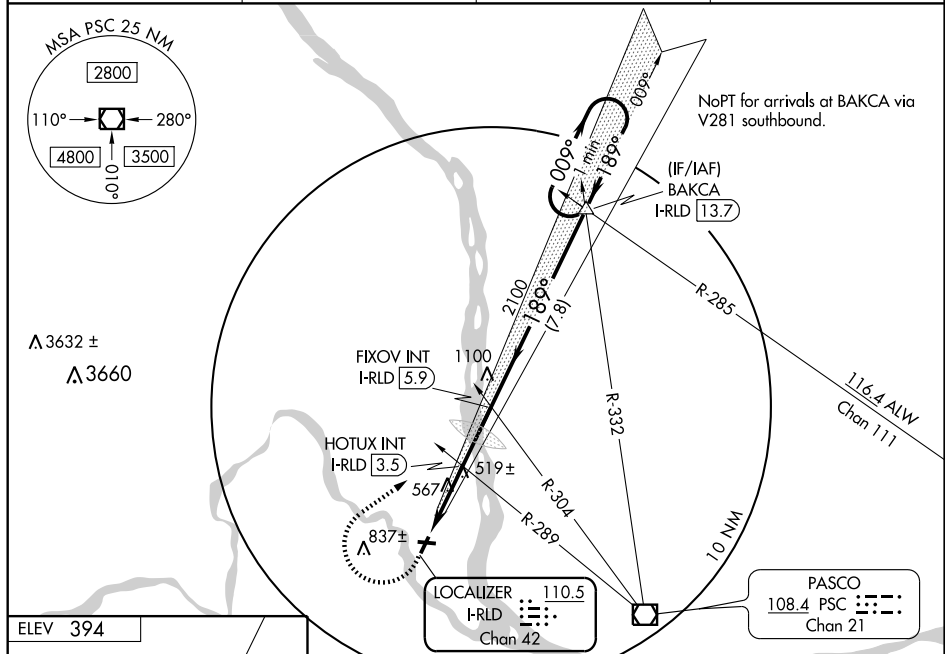
LOC/DME I-RLD <b>110.5</b> Chan <b>42</b>	APP CRS <b>189°</b>	Rwy Idg TDZE Apt Elev	<b>4009</b> <b>390</b> <b>394</b>
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# LOC RWY 19

RICHLAND (RLD)

<p>▼ NA</p> <p>Visibility reduction by helicopters NA. VDP NA when using Pasco altimeter setting. When local altimeter setting not received, use Pasco altimeter setting and increase all MDA 40 feet. Inoperative table does not apply to S-19 all Cats, and HOTUX fix minimums S-19 Cat C.</p>	<p>MALS</p>	<p>MISSED APPROACH: Climbing right turn to 4000 via heading 038° and I-RLD NE course to BAKCA INT/I-RLD 13.7 DME and hold.</p>
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AWOS-3 <b>132.675</b>	CHINOOK APP CON ★ <b>128.75 377.2</b>	CINC DEL <b>122.4</b>	UNICOM <b>122.7 (CTAF)</b>
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4000	I-RLD	BAKCA	BAKCA	One Minute Holding Pattern
hdg 038°	NE crs	△	I-RLD 13.7	
	HOTUX INT	I-RLD 3.5	FIXOV INT	I-RLD 5.9
	I-RLD 0.7	I-RLD 1.9	≤ 3.05° TCH 45	2100
	1.2 NM	1.6 NM	2.4 NM	7.8 NM
CATEGORY	A	B	C	D
S-19	1320-1¼ 930 (1000-1¼)		1320-2¾ 930 (1000-2¾)	1320-3 930 (1000-3)
CIRCLING	1320-1¼ 926 (1000-1¼)		1320-2¾ 926 (1000-2¾)	1320-3 926 (1000-3)
HOTUX FIX MINIMUMS				
S-19	800-¾ 410 (500-¾)		800-1¼ 410 (500-1¼)	1100-2¼ 710 (800-2¼)
CIRCLING	980-1 586 (600-1)	1000-1 606 (700-1)	1000-1¾ 606 (700-1¾)	1140-2½ 746 (800-2½)

# RNAV (GPS) RWY 19

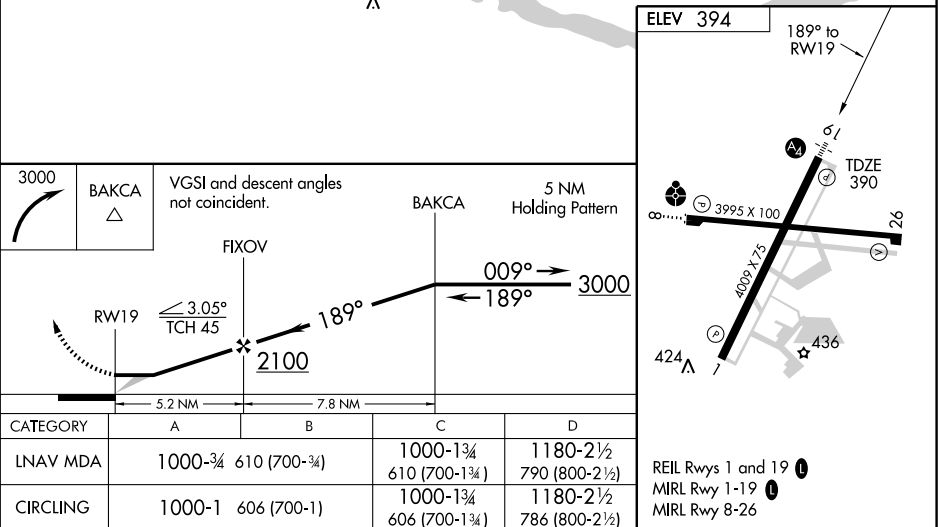
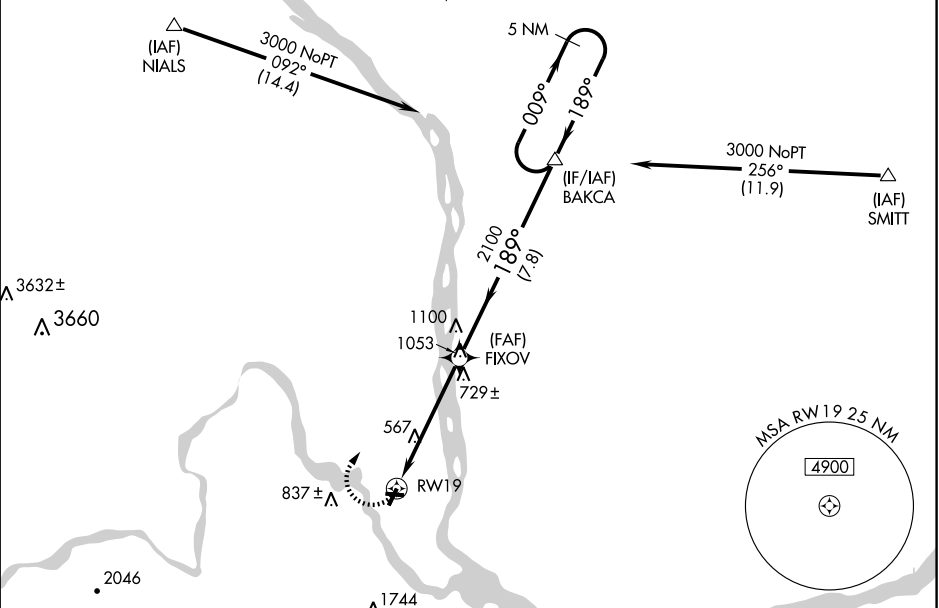
RICHLAND (RLD)

APP CRS	Rwy Idg	<b>4009</b>
<b>189°</b>	TDZE	<b>390</b>
	Apt Elev	<b>394</b>

	<b>DME/DME-RNP-0.3 NA.</b> Inoperative table does not apply to Cat C.	<b>MALS</b> 	<b>MISSED APPROACH:</b> Climbing right turn to 3000 direct BAKCA and hold.
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<b>AWOS-3</b> <b>132.675</b>	<b>CHINOOK APP CON *</b> <b>128.75 377.2</b>	<b>CLNC DEL</b> <b>122.4</b>	<b>UNICOM</b> <b>122.7 (CTAF) 0</b>
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Procedure NA for arrivals at NIALS via V187 northwest bound, and arrivals at SMITT via V204 northbound.





NW-1, 21 OCT 2010 to 18 NOV 2010

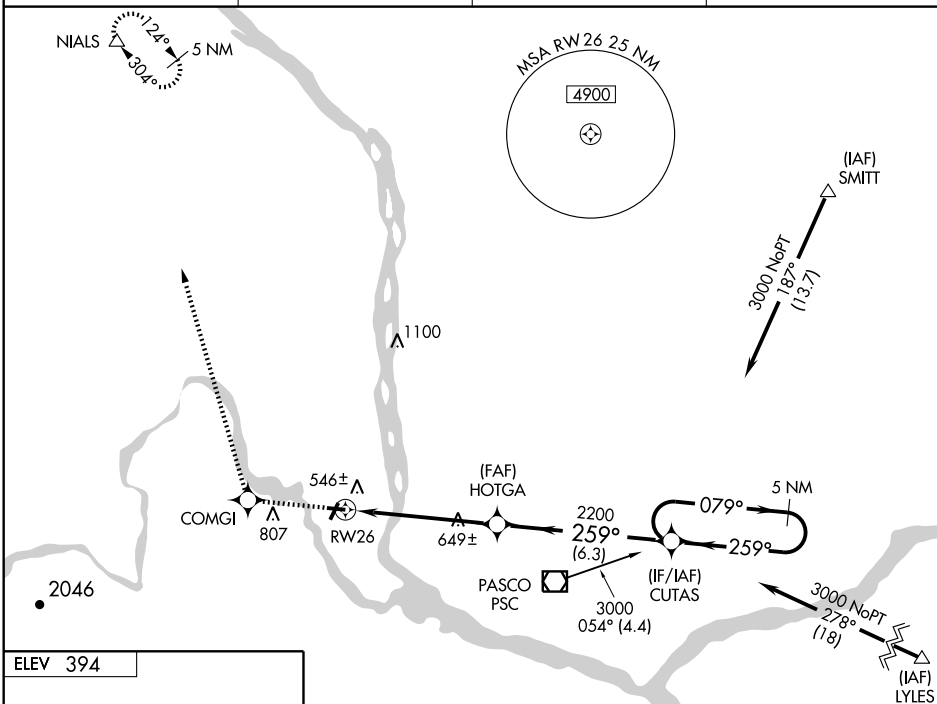
NW-1, 21 OCT 2010 to 18 NOV 2010

WAAS Chan <b>50299</b> W26A	APP CRS <b>259°</b>	Rwy Idg <b>3995</b> TDZE <b>389</b> Apt Elev <b>394</b>
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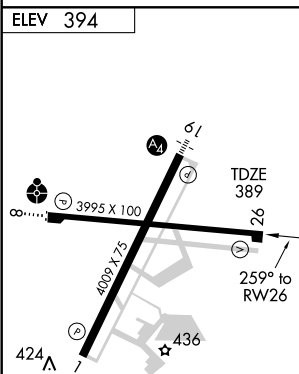
## RNAV (GPS) RWY 26

RICHLAND (RLD)

	DME/DME RNP-0.3 NA. Baro-VNAV NA.		MISSED APPROACH: Climb to 3500 direct COMGI and via 327° track to NIALS and hold.	
	AWOS-3 <b>132.675</b>	CHINOOK APP CON ★ <b>128.75 377.2</b>	CLNC DEL <b>122.4</b>	UNICOM <b>122.7</b> (CTAF) 



Procedure NA for arrivals at PSC VOR/DME via V187 southwest bound.

REIL Rwy 1 and 19 **L**MIRL Rwy 1-19 **L**

MIRL Rwy 8-26

3500 ↑	COMGI ✦	327° track	NIALS △	CUTAS 5 NM Holding Pattern			
				GS 3.00° TCH 50			
CATEGORY	A		B		C		D
LPV DA			676-1 287 (300-1)				
LNNAV/ VNAV	DA		945-2 556 (600-2)				
LNNAV MDA	920-1	531 (600-1)	920-1½ 531 (600-1½)		920-1¾ 531 (600-1¾)		
CIRCLING	1000-2 606 (700-2)				1140-2½ 746 (800-2½)		

## RICHLAND, WASHINGTON

Orig-B 09239

46°18'N-119°18'W

RICHLAND (RLD)

RNAV (GPS) RWY 26

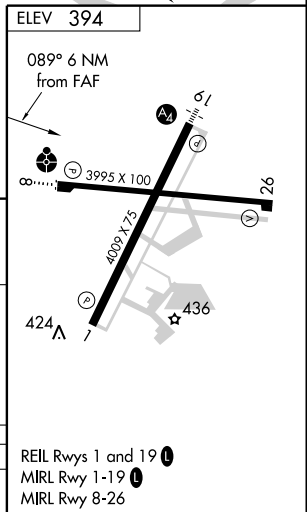
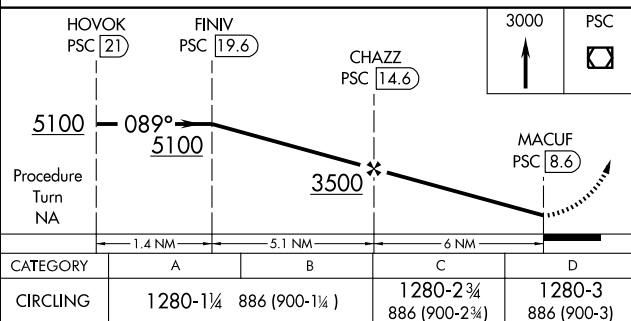
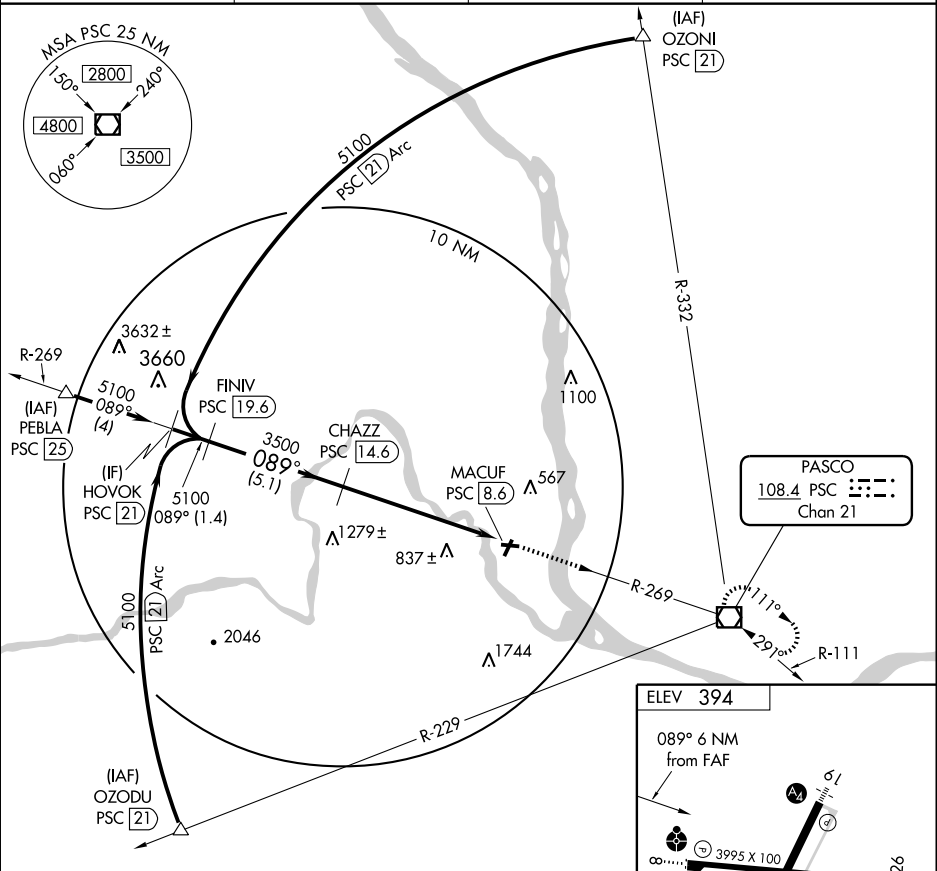
NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

VOR/DME PSC <b>108.4</b> Chan <b>21</b>	APP CRS <b>089°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>N/A</b> <b>394</b>
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**VOR/DME-A**  
RICHLAND (RLD)

<div><div><div></div><div></div></div></div>		MISSED APPROACH: Climb to 3000 direct PSC VOR/DME and hold.	
AWOS-3 132.675	CHINOOK APP CON★ 128.75 377.2	CLNC DEL 122.4	UNICOM 122.7 (CTAF) 0



VOR/DME PSC <b>108.4</b> Chgn <b>21</b>	APP CRS <b>269°</b>	Rwy Idg <b>3995</b> TDZE <b>389</b> Apt Elev <b>394</b>
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VOR RWY 26  
RICHLAND (RLD)



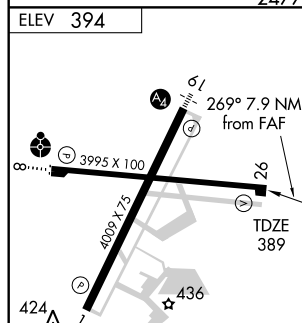
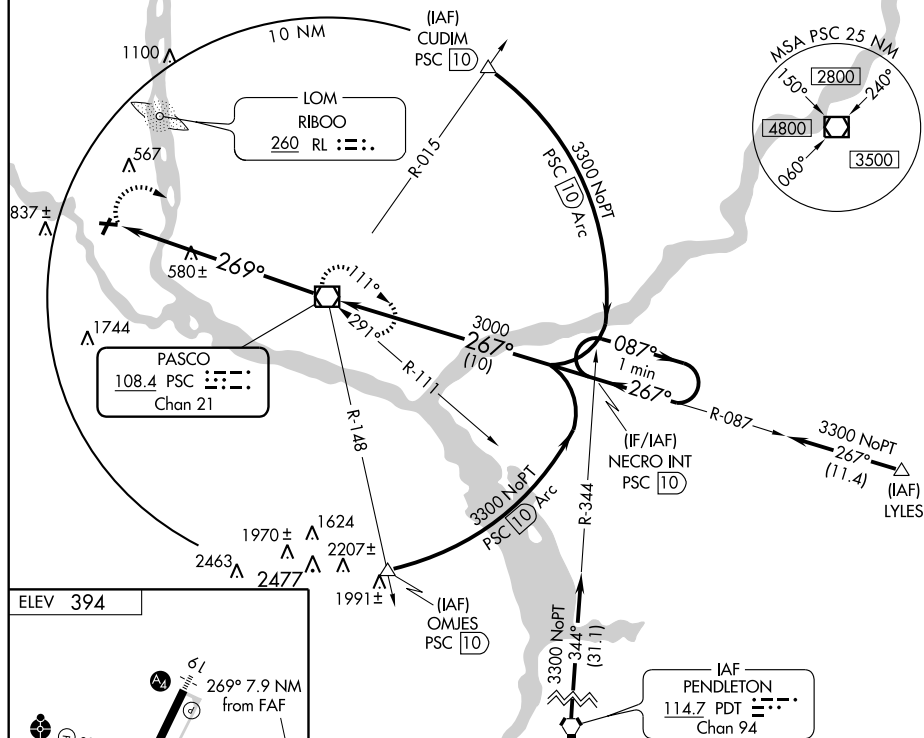
**MISSED APPROACH:** Climbing right turn to 3000  
direct PSC VOR/DME and hold.

AWOS-3  
132.675

CHINOOK APP CON★  
128.75 377.2

CLNC DEL  
**122.4**UNICOM  
122.7 (CTAF) **L**

Procedure NA for arrivals on PDT VORTAC airway radials 290 CW 029.



REIL Rwys 1 and 19 **L**  
MIRL Rwy 1-19 **L**  
MIRL Rwy 8-26

FAF to MAP 7.9 NM					
Knots	60	90	120	150	180
Min:Sec	7:54	5:16	3:57	3:10	2:38

CATEGORY	A	B	C	D
S-26	1000-1	611 (700-1)	1000-1 $\frac{3}{4}$ 611 (700-1 $\frac{3}{4}$ )	1000-2 611 (700-2)
CIRCLING	1000-1	606 (700-1)	1000-1 $\frac{3}{4}$ 606 (700-1 $\frac{3}{4}$ )	1140-2 $\frac{1}{2}$ 746 (800-2 $\frac{1}{2}$ )

RICHLAND, WASHINGTON  
Amdt 7A 10266

46°18'N-119°18'W

RICHLAND (RLD)  
VOR RWY 26

NW-1. 21 OCT 2010 to 18 NOV 2010

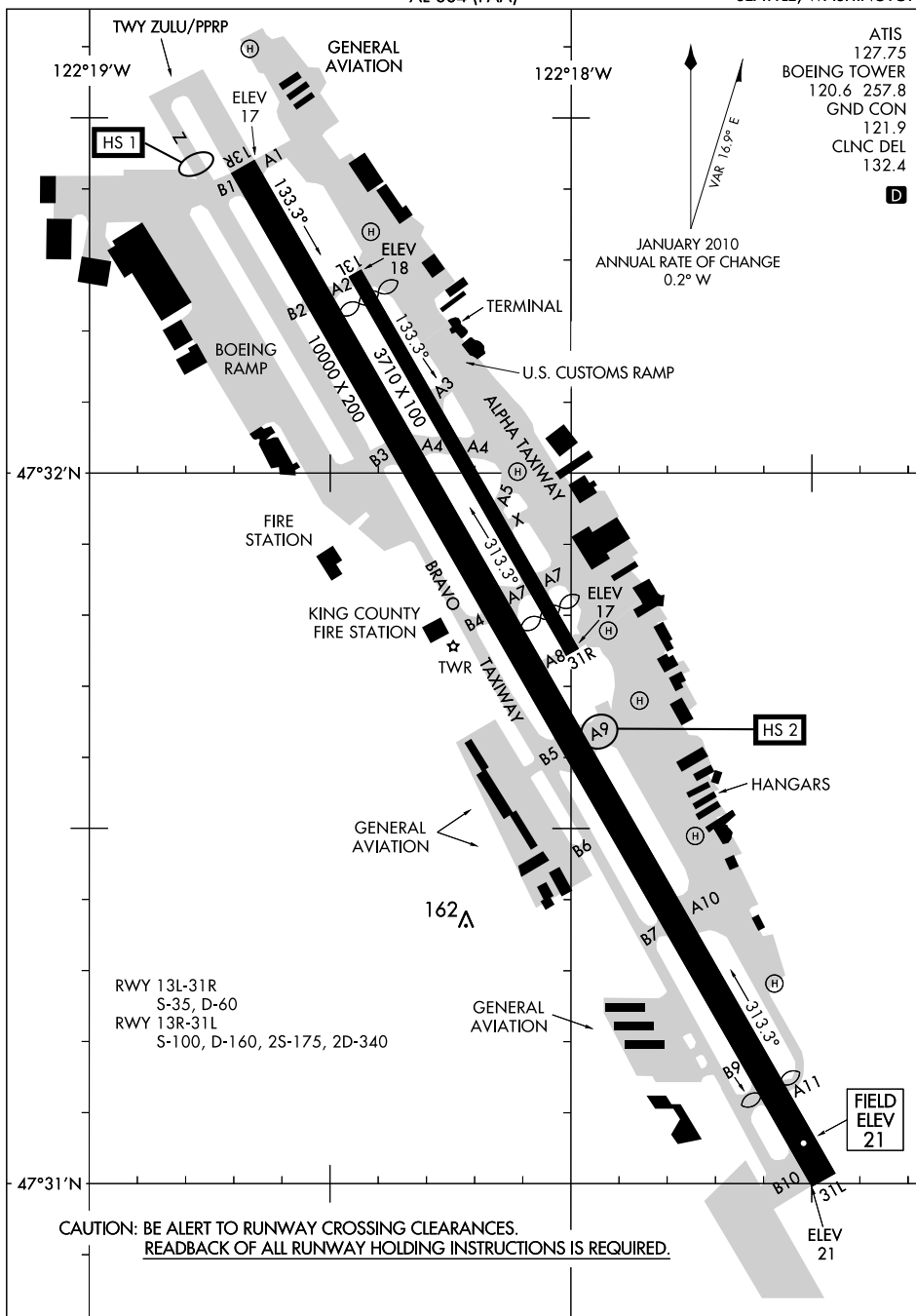
NW-1, 21 OCT 2010 to 18 NOV 2010

## AIRPORT DIAGRAM

SEATTLE/BOEING FIELD/KING COUNTY INTL (BFI)  
AL-384 (FAA)

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



NW-1, 21 OCT 2010 to 18 NOV 2010

## AIRPORT DIAGRAM

SEATTLE, WASHINGTON  
SEATTLE/BOEING FIELD/KING COUNTY INTL (BFI)

**SEATTLE** N47°26.12' W122°18.58' NOTAM FILE SEA.

**SEATTLE**

(H) **VORTACW** 116.8 SEA Chan 115 at Seattle-Tacoma Intl. 354/19E.

**H-1B, L-1D**

VOR portion unusable:

303°-333° beyond 20 NM below 2,900'  
303°-333° beyond 30 NM below 4,000'  
333°-353° beyond 15 NM below 3,500'  
353°-008° beyond 20 NM below 2,900'  
008°-023° beyond 20 NM below 3,500'

008°-023° beyond 30 NM below 4,100'  
233°-273° beyond 8 NM below 5,500'  
233°-273° beyond 20 NM below 8,000'  
233°-273° beyond 30 NM below 10,000'  
233°-273° beyond 35 NM below 3,500'

DME portion unusable:

008°-028° byd 20 NM blo 4,500'  
008°-028° byd 30 NM blo 7,000'

303°-008° byd 30 NM below 3,500'  
203°-253° byd 27 NM.

**RCO** 123.65 (SEATTLE RADIO) **RCO** 122.5 (SEATTLE RADIO)

## SEATTLE

**BOEING FLD/KING CO INTL** (BFI) 4 S UTC-8(-7DT) N47°31.80' W122°18.12'

**SEATTLE**

21 B S4 **FUEL** 100LL, JET A OX 1, 2, 3, 4 TPA—See Remarks AOE

**H-1B, L-1D**

Class II, ARFF Index A NOTAM FILE BFI

**IAP, AD**

**Rwy 13R-31L:** H10000X200 (ASPH-GRVD) S-100, D-160,

2S-175, 2D-340 HIRL

**Rwy 13R:** MALSF. PAPI(P4L)—GA 3.0° TCH 39'. Fence. Rgt tfc.

**Rwy 31L:** REIL. PAPI(P4L)—GA 3.1° TCH 39'. Thld dsplcd 880'. Railroad.

**Rwy 13L-31R:** H3710X100 (ASPH-GRVD) S-35, D-60 MIRL

**Rwy 13L:** REIL. PAPI(P2L)—GA 3.0° TCH 39'. Thld dsplcd 240'. Glide Slope Antenna.

**Rwy 31R:** REIL. PAPI(P2L)—GA 3.0° TCH 39'. Thld dsplcd 365'. Tree. Rgt tfc.

### RUNWAY DECLARED DISTANCE INFORMATION:

**Rwy 13R:** TORA-10001 TODA-10000 ASDA-9120 LDA-9120

**Rwy 31L:** TORA-10001 TODA-10001 ASDA-10001 LDA-9120

### AIRPORT REMARKS:

Attended continuously. Bird flocks within arpt vicinity, check local advisories. BFI Tower is authorized to conduct simultaneous same direction ops to parallel rwys SR to SS for twin engine propeller driven or smaller acft. Rwy 13L-31R not available for air carrier ops. Rwy 13L-31R limited to use by acft up to 12,500 lbs. Touch and go lds prohibited 0600-1500Z†. Twr 80' AGL located 1200' north and 900' west of thld Rwy 13R. If access to Boeing ramp required; ctc Boeing Flight Dispatch 206-655-3421 for approval during normal duty hours. Twy A6 clsd indef. Twy B8 clsd indef. Twy A1 and Twy A from A1-A3 restricted to acft up to 150,000 pounds and less than 108' wingspan. Twy A2, B2 and A11 restricted to acft up to 60,000 pounds. Twy A3, A5, and A8 restricted to acft up to 12,500 pounds. PPR for parking arrangements for acft over 12,500 lbs maximum tkf weight is recommended. Twy A, B, and all intersections have NSTD markings. Extensive helicopter training activity on Twy B. For noise abatement procedures, ctc noise office at 206-296-7437. Twy Z and 880' special use pavement avbl 72 hrs PPR. Ctc arpt ops 206-296-7334. For Museum of Flight transient acft parking, prior permission required, call 206-764-5710. Itinerant/transient parking avbl. Ctc ops 206-296-7334. PPR for acft greater than 12,500 lbs. Rwy 13L-31R TPA-1000(979), Rwy 13R-31L TPA-800(779). HIRL Rwy 13R-31L open dusk-dawn. MIRL Rwy 13L-31R not opr 1400-2300Z†. Flight Notification Service (ADCUS) available. NOTE: See Special Notices Section—Simultaneous Operations.

**WEATHER DATA SOURCES:** ASOS (206) 763-6904.

**COMMUNICATIONS:** ATIS 127.75 (206) 767-4113 **UNICOM** 122.95

**SEATTLE FSS** (SEA) on arpt.

**SEATTLE RCO** 122.5 (SEATTLE RADIO) **SEATTLE RCO** 123.65 (SEATTLE RADIO)

Ⓡ **SEATTLE APP/DEP CON** 119.2 (076°-160° Rwy 13) (341°-075°) 120.1 (199°-300°) 120.4 (301°-340° Rwy 31) 125.9 (076°-160° Rwy 31) (301°-340° Rwy 13) 126.5 (161°-198°)

**BOEING TOWER** 120.6 (128°-308° and Departures Rwy 13R-31L, also all Jets, heavy aircraft and IFR arrivals. 118.3 309°-127° and Departures Rwy 13L-31R.)

**GND CON** 121.9 **CLNC DEL** 132.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA.

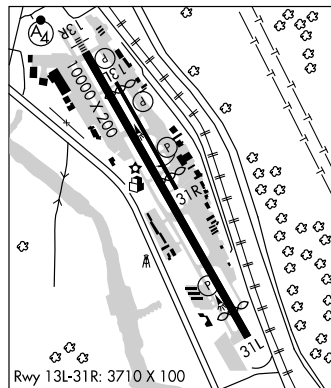
**SEATTLE (H) VORTACW** 116.8 SEA Chan 115 N47°26.12' W122°18.58' 344° 5.7 NM to fld. 354/19E.

**NOLLA NDB (LOM)** 362 BF N47°37.95' W122°23.37' 130° 7.1 NM to fld.

**ILS/DME** 110.9 I-BFI Chan 46 Rwy 13R. Class IA. LOM **NOLLA NDB**. Localizer back course unusable byd 13 NM blo 3,500'. Localizer back course unusable byd 10° left and right of course. Localizer unusable byd 20° left of course. DME unusable byd 30° left of course.

**ILS/DME** 110.9 I-CHJ Chan 46 Rwy 31L. Class IA. Localizer unusable byd 15° east of course. ILS/DME unusable byd 10° right of course.

**COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.



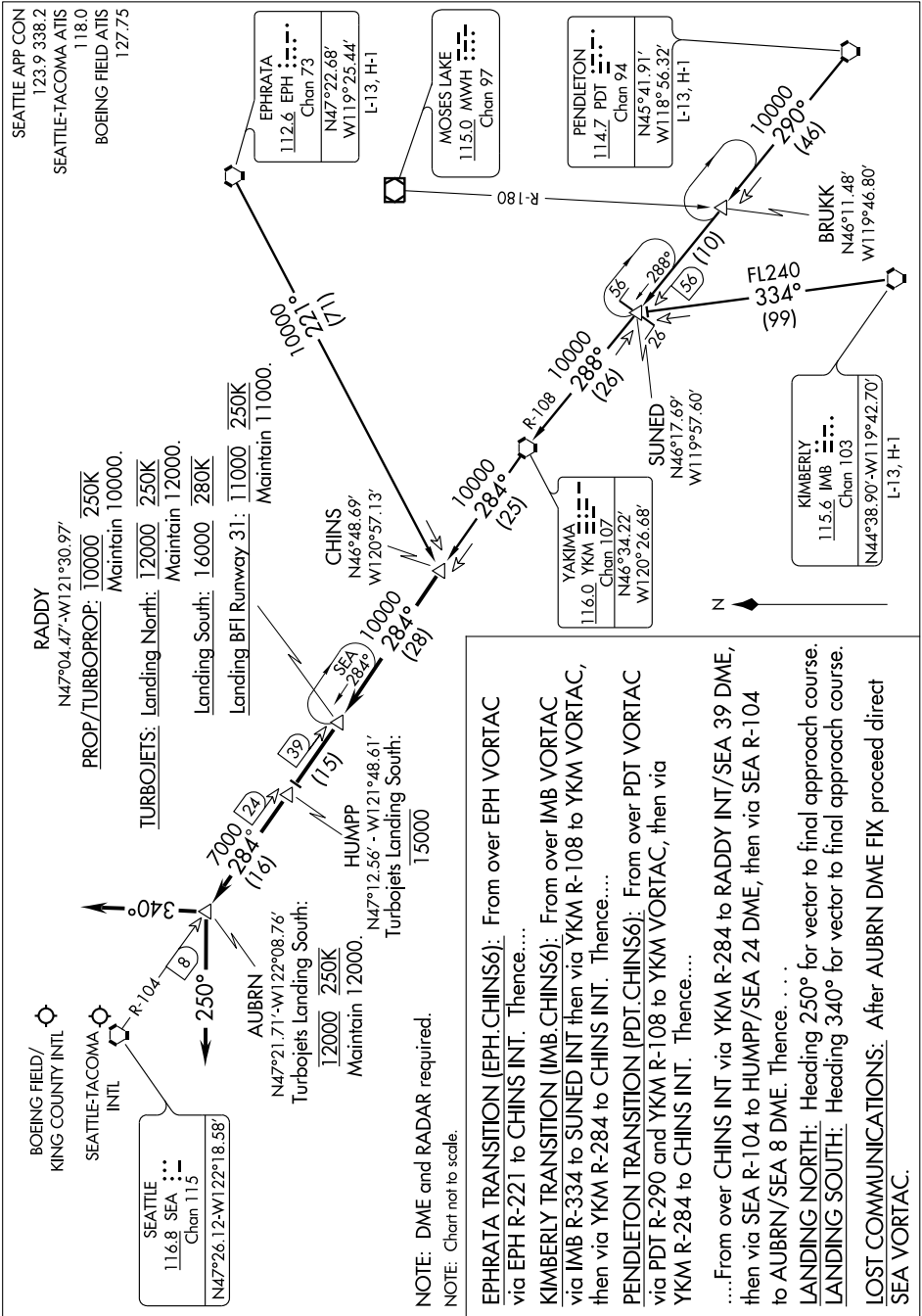


CHINS SIX ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



CHINS SIX ARRIVAL

SEATTLE, WASHINGTON

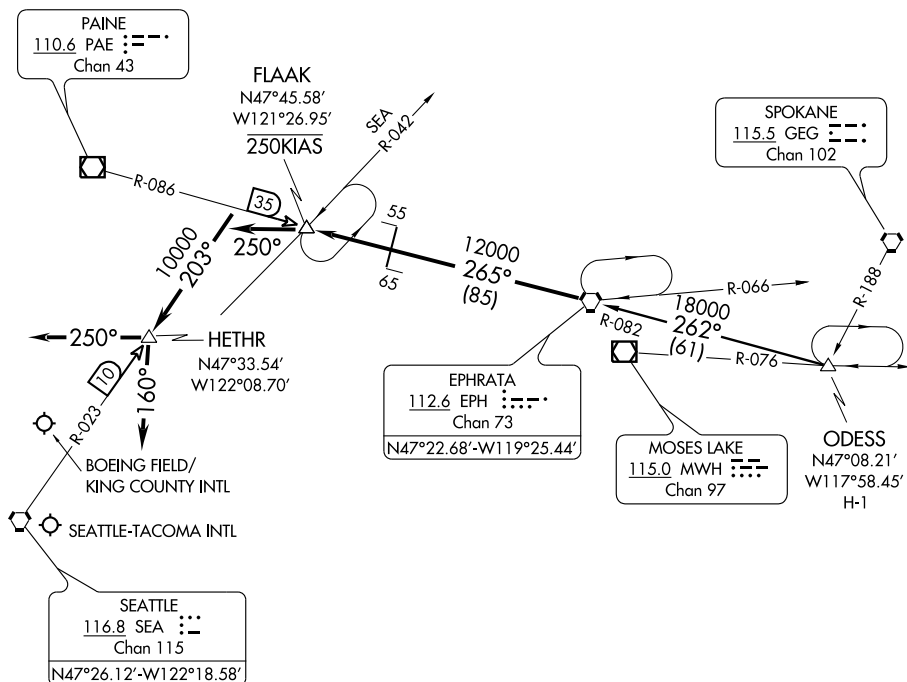
NW-1, 21 OCT 2010 to 18 NOV 2010

## EPHRATA SIX ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON

SEATTLE APP CON  
123.9 338.2  
SEATTLE-TACOMA ATIS  
118.0  
BOEING FIELD ATIS  
127.75



NOTE: DME and RADAR required.

ODESS TRANSITION (ODESS.EPH6): From over ODESS INT via EPH R-082 to EPH VORTAC. Thence....

....From over EPH VORTAC via EPH R-265 and PAE R-086 to FLAAK INT. Then via heading 250° to intercept the SEA R-023, then via SEA R-023 to HETHR DME Fix, thence....

LANDING NORTH: Heading 160° for vectors to final approach course;

LANDING SOUTH: Heading 250° for vectors to final approach course.

LOST COMMUNICATIONS: From over HETHR DME proceed direct SEA VORTAC.

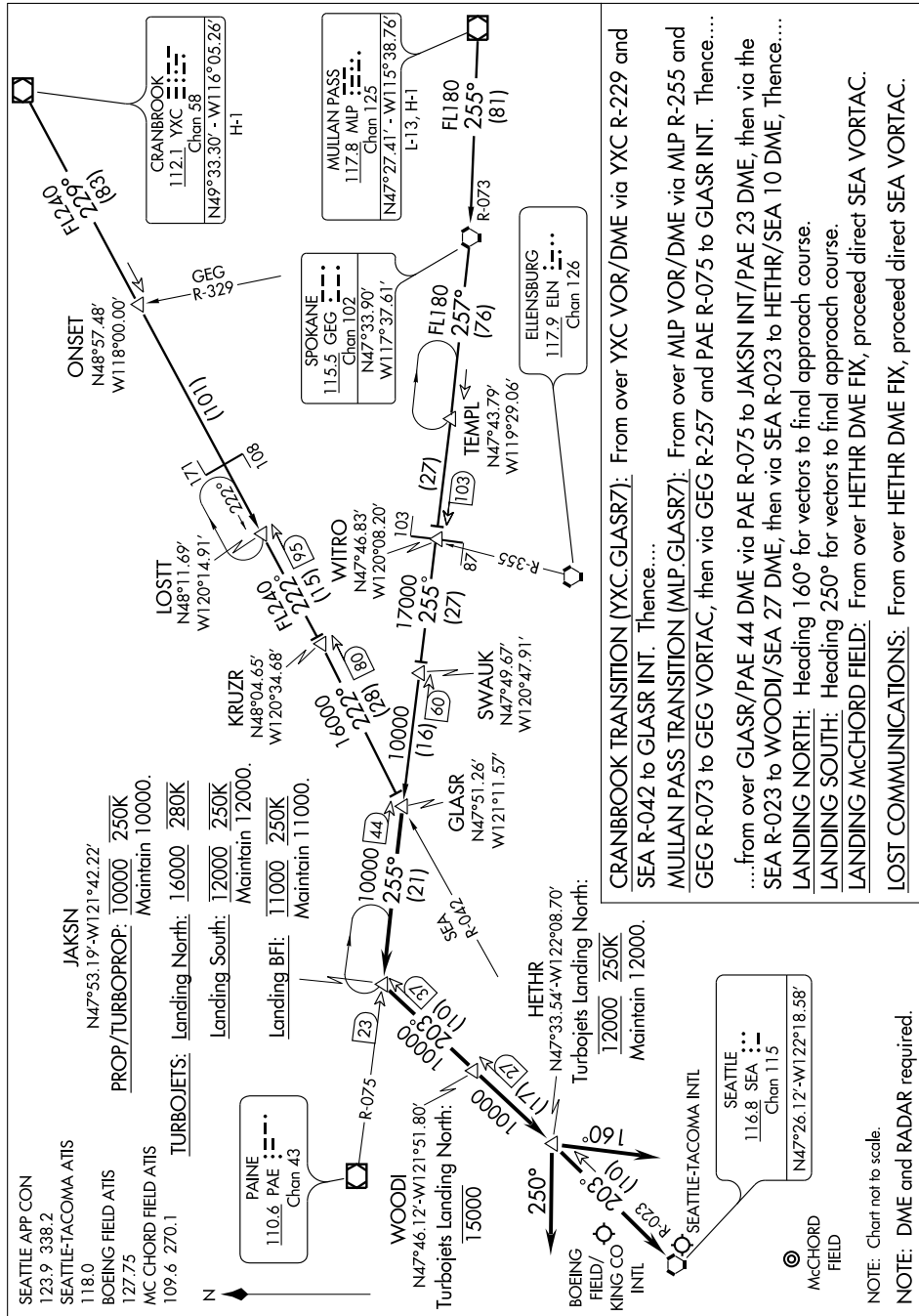
010Z 20Z NOV 2010 1001 12' 1'-MN

# GLASR SEVEN ARRIVAL

10154

ST-582 (FAA)

SEATTLE, WASHINGTON



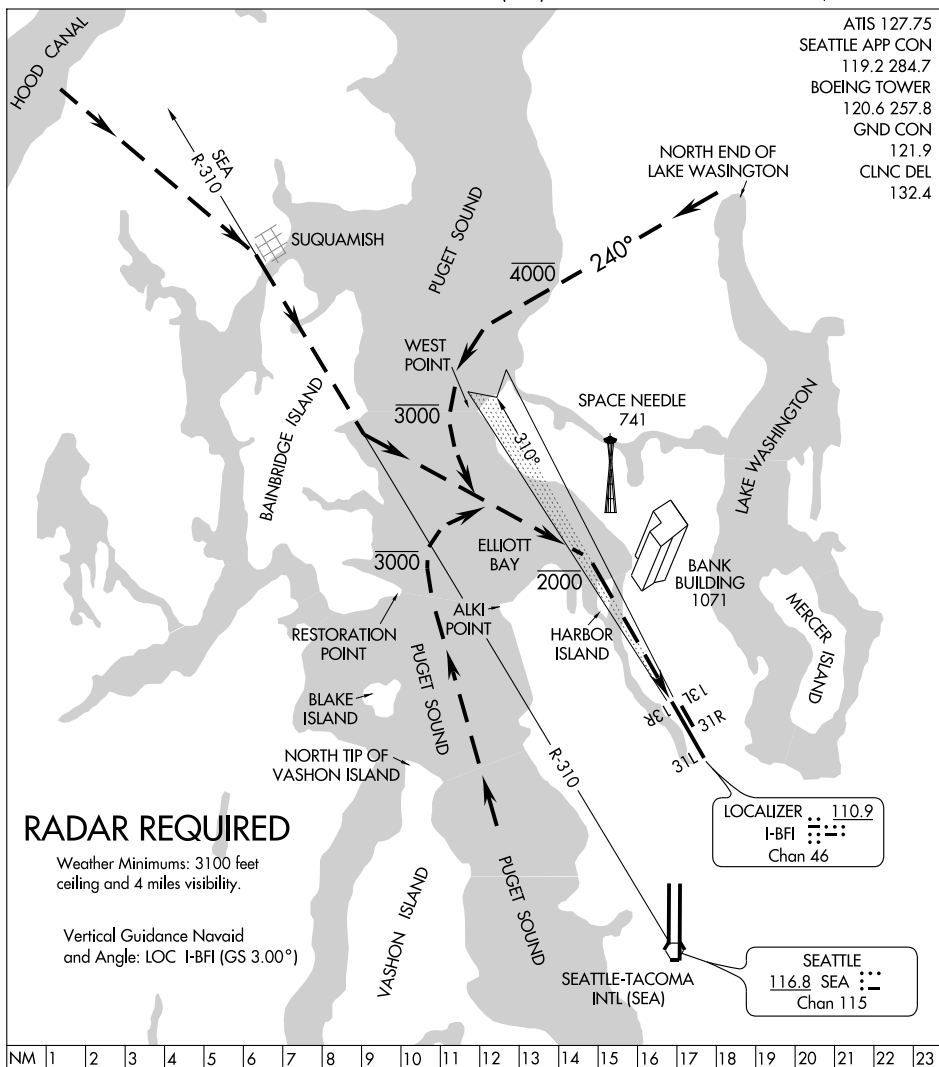
# GLASR SEVEN ARRIVAL

10154

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010

## HARBOR VISUAL RWY 13R

SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)  
AL-384 (FAA) SEATTLE, WASHINGTON

## HARBOR VISUAL APPROACH RWY 13R

Expect radar vectors from the Northwest, over the Hood Canal on the SEA R-310; from the North and Northeast, to the north end of Lake Washington; from the Southwest, South and Southeast, to Puget Sound abeam the north tip of Vashon Island. When cleared for the Harbor Visual Approach Runway 13R, proceed via the depicted routes over the middle of Puget Sound and Elliott Bay to Harbor Island and complete a straight in visual approach to Boeing Field/King County Intl Airport (BFI). Adherence to the recommended altitudes is strongly recommended to reduce the incidence of TCAS alarms. Visual approaches to Seattle-Tacoma Intl Airport (SEA) may be conducted simultaneously through Elliott Bay. It is essential that all aircraft remain in the center of Elliot Bay for noise abatement.

## HARBOR VISUAL RWY 13R

47°32'N - 122°18'W

SEATTLE, WASHINGTON

SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)

## HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
BILLINGS, MT		
BILLINGS LOGAN INTL (BIL)	HS 1	Rwy 28R hold line at an unusual location at east edge of run up area.
	HS 2	Twy H crosses Rwy 07 protected area.
BOISE, ID		
BOISE AIR TERMINAL/GOWEN FLD (BOI)	HS 1	Multiple hold lines visible, left turn at Twy A for departure on Rwy 10L.
CHEYENNE, WY		
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)	HS 1	Confusing twy configuration.
EUGENE, OR		
MAHLON SWEET FIELD (EUG)	HS 1	No access to Rwy 34L past Twy A9.
EVERETT, WA		
SNOHOMISH COUNTY (PAINE FIELD) (PAE)	HS 1	Hold line for Rwy 11-29 on Twy A4 and Twy A5 int are more than 500' wide.
	HS 2	Rwy 29 thr in close proximity to ramp areas.
	HS 3	Twy A between Twy A8 and Twy A9 not visible from ATCT.
GREAT FALLS, MT		
GREAT FALLS INTL (GTF)	HS 1	No Rwy 21 access beyond A1.
	HS 2	A3 aligned with Rwy 25, wrong rwy departure risk.
IDAHO FALLS, ID		
IDAHO FALLS RGNL (IDA)	HS 1	Rwy 17-35 Twy C hold bars.
	HS 2	Twy A1 and Rwy 20 apch hold bar.
	HS 3	Rwy 17 and Twy A hold bar.
LEWISTON, ID		
LEWISTON-NEZ PERCE COUNTY (LWS)	HS 1	Twy C and Twy G int close proximity to Rwy 12-30.
	HS 2	Twy G between Rwy 08-26 and Rwy 30 thr. Short distance between rwys.
PORTLAND, OR		
PORTLAND INTL (PDX)	HS 1	Limited wing-tip clearance at twy convergence point.
SALEM, OR		
MCNARY FLD (SLE)	HS 1	When the ATCT is closed aircraft should not hold at this position if traffic is arriving or departing Rwy 13-31.

(SEE CONTINUATION PAGE FOR MORE LISTINGS)

## HOT SPOTS

(CONTINUED)

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
SEATTLE, WA		
BOEING FIELD/ KING COUNTY INTL (BFI)	HS 1	Twy Z restricted access area.
	HS 2	Rwy 13R-31L and Twy A9. Wrong rwy departure risk.
SEATTLE, WA		
SEATTLE-TACOMA INTL (SEA)	HS 1	Aircraft exiting Rwy 34R via Twy H then Twy J; limited distance between rwy.

\*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

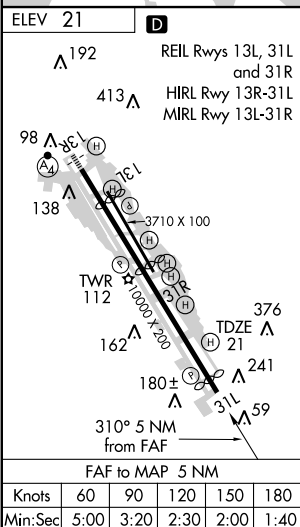
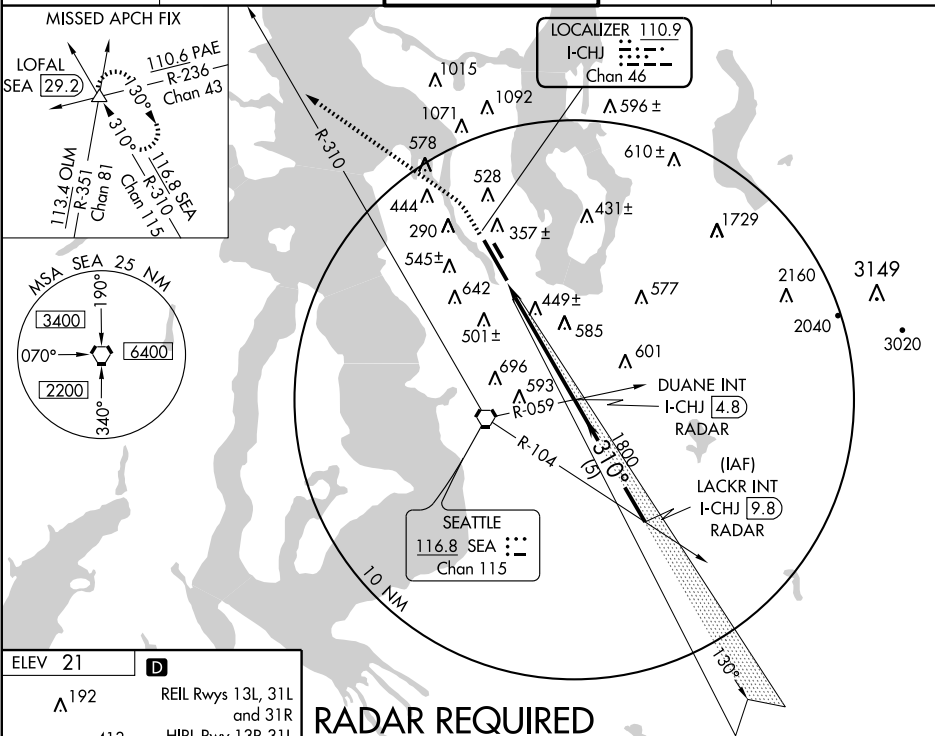
LOC/DME I-CHJ <b>110.9</b> Chan <b>46</b>	APP CRS <b>310°</b>	Rwy Idg TDZE Apt Elev	<b>9120</b> <b>21</b> <b>21</b>
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## ILS or LOC RWY 31L

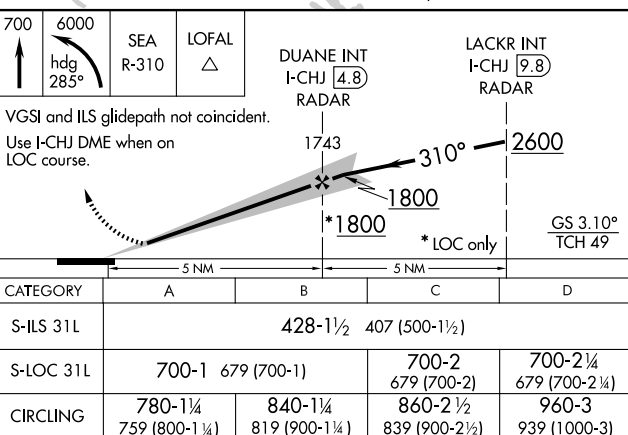
SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)

<b>V</b> <b>A</b>	MISSED APPROACH: Climb to 700 then climbing left turn to 6000 via heading 285° and SEA R-310 to LOFAL Int/SEA 29.2 DME and hold.			
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ATIS <b>127.75</b>	SEATTLE APP CON <b>119.2 284.7</b>	BOEING TOWER <b>120.6 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>132.4</b>
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## RADAR REQUIRED



LOC/DME I-BFI <b>110.9</b> Chan <b>46</b>	APP CRS <b>130°</b>	Rwy Idg TDZE Apt Elev	<b>9120</b> <b>18</b> <b>21</b>
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## ILS RWY 13R

SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)



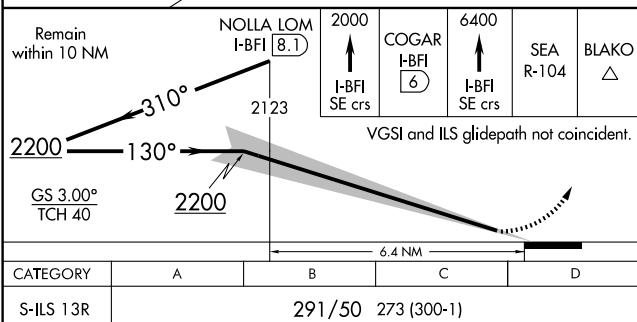
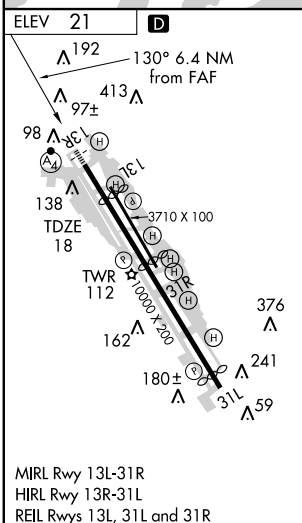
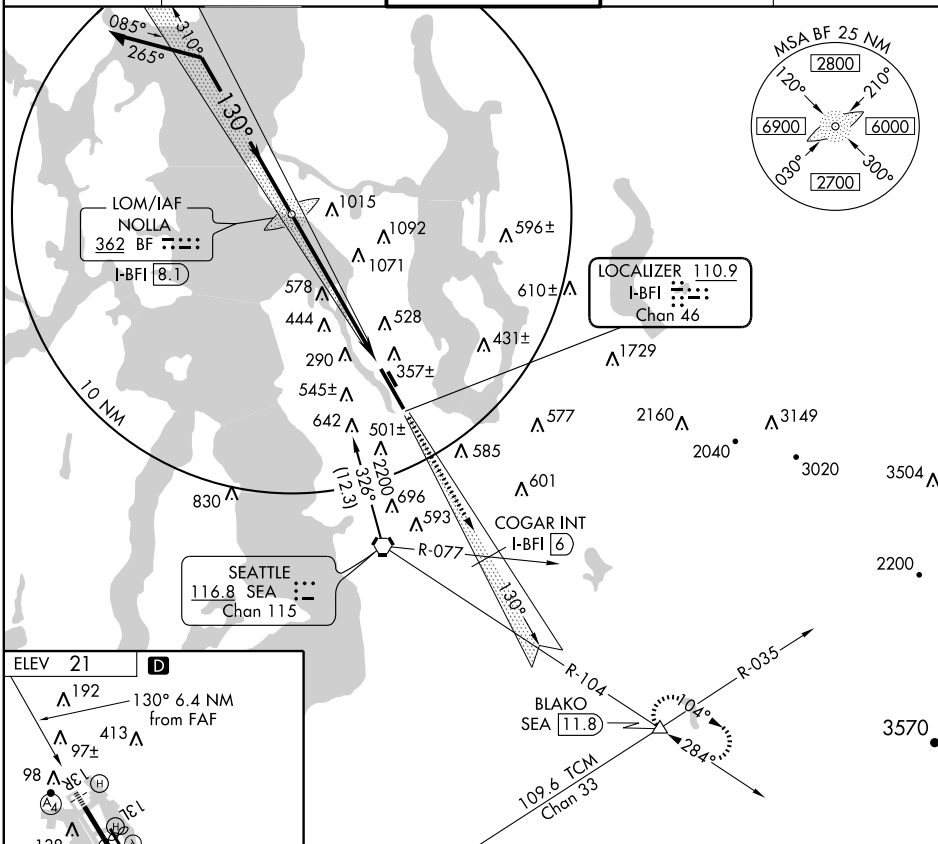
Inoperative table does not apply.  
Visibility reduction by helicopters NA.

MALSF

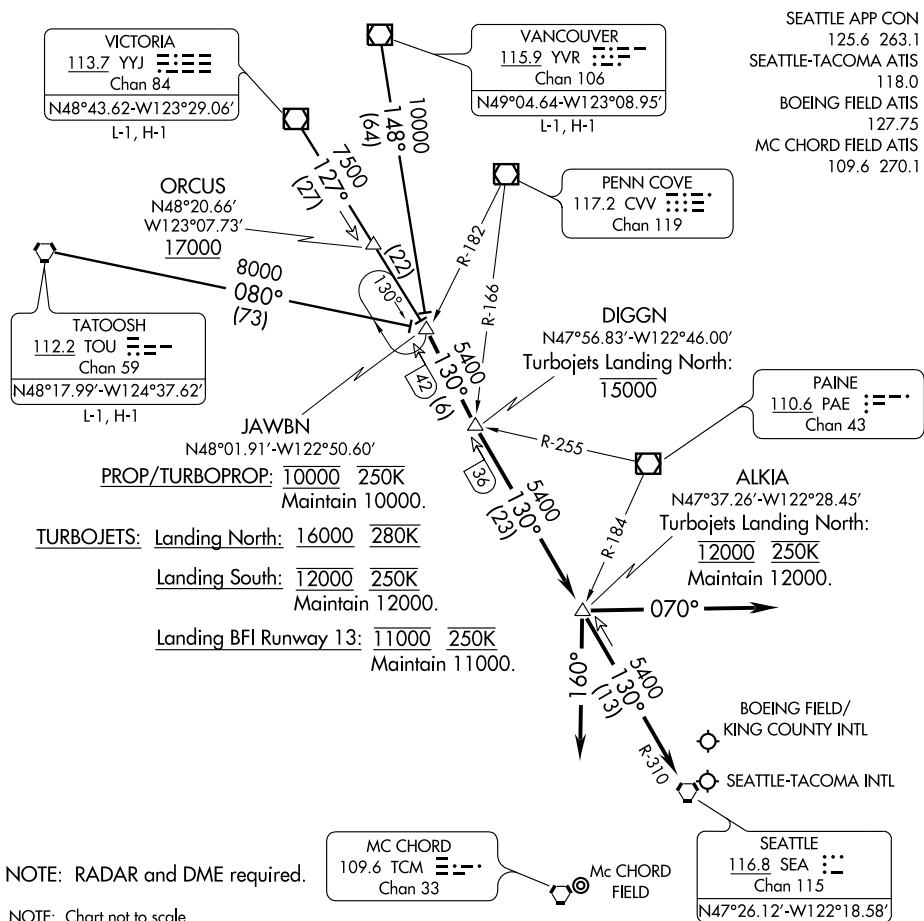


MISSED APPROACH: Climb to 2000 via I-BFI SE course to COGAR/I-BFI 6 DME/SEA R-077, then continue climb to 6400 via I-BFI SE course and SEA R-104 to BLAKO Int/SEA 11.8 DME and hold, continue climb-in-hold to 6400.

ATIS <b>127.75</b>	SEATTLE APP CON <b>119.2 284.7</b>	BOEING TOWER <b>120.6 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>132.4</b>
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**TATOOSH TRANSITION (TOU.JAWBN1):** From over TOU VORTAC via TOU R-080 to JAWBN INT. Thence...

**VANCOUVER TRANSITION (YVR.JAWBN1):** From over YVR VORTAC via YVR R-148 to JAWBN INT. Thence...

**VICTORIA TRANSITION (YYJ.JAWBN1):** From over YYJ VOR/DME via YYJ R-127 to JAWBN INT. Thence...

....From over JAWBN INT/SEA 42 DME via SEA R-310 to DIGGN/SEA 36 DME then via SEA R-310 to ALKIA INT/SEA 13 DME, thence....

**LANDING NORTH:** Depart ALKIA INT heading 160° for vectors to final approach course.

**LANDING SOUTH:** Depart ALKIA INT heading 070° for vectors to final approach course.

**LANDING McCHORD FIELD:** After ALKIA INT proceed direct SEA VORTAC.

**LOST COMMUNICATIONS:** After ALKIA INT proceed direct SEA VORTAC.

(KENTT4.KENTT) 10210

# KENT FOUR DEPARTURE

SEATTLE/BOEING FIELD/KING COUNTY INTL (BFI)  
SL-384 (FAA) SEATTLE, WASHINGTON

ATIS 127.52  
CLNC DEL  
132.4  
GND CON  
121.9  
BOEING TOWER  
120.6 257.8  
SEATTLE DEP CON  
119.2 284.7

VANCOUVER  
115.9 YVR   
Chan 106  
N49°04.64'-W123°08.95'  
L-1, H-1

CRANBROOK  
112.1 YXC   
Chan 58  
N49°33.30'-W116°05.27'  
H-1

TAKE-OFF OBSTACLES:  
463' Tree  
288' Tree  
DEPARTURE OBSTACLES:  
620' Tower  
558' Tree  
562' Tank

VICTORIA  
113.7 YYJ   
Chan 84  
N48°43.62'-W123°29.06'  
L-1, H-1

WHATCOM  
113.0 HUH   
Chan 77  
N48°56.72'-W122°34.76'  
L-1, H-1

PAINE  
110.6 PAE   
Chan 43  
N47°55.19'-W122°16.67'  
L-1

SEATTLE  
116.8 SEA   
Chan 115  
N47°26.12'-W122°18.58'  
L-1, H-1

WENATCHEE  
111.0 EAT   
Chan 47  
N47°23.98'-W120°12.65'  
L-13

MOSES LAKE  
115.0 MWH   
Chan 97  
N47°12.65'-W119°19.01'  
L-13, H-1

McCHORD  
109.6 TCM   
Chan 33  
N47°08.86'-W122°28.50'  
L-1, H-1

HOQUIAM  
117.7 HQM   
Chan 124  
N46°56.82'-W124°08.96'  
L-1, H-1

OLYMPIA  
113.4 OLM   
Chan 81  
N46°58.30'-W122°54.11'  
L-1, H-1

ELLENSBURG  
117.9 ELN   
Chan 126  
N47°01.46'-W120°27.51'  
L-13

BATTLE GROUND  
116.6 BTG   
Chan 113  
N45°44.87'-W122°35.49'  
L-1, H-1

YAKIMA  
116.0 YKM   
Chan 107  
N46°34.22'-W120°26.68'  
L-13, H-1

TAKE-OFF Rwy 13L/R: Standard with a minimum climb of  
380' per NM to 700'.

NOTE: Chart not to scale.

NOTE: No left turns authorized until leaving 1000'.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13L/R: Climb runway heading, expect radar vectors to assigned route/fix. Maintain 2000 or ATC assigned altitude, expect clearance to filed altitude within 3 minutes after departure.

LOST COMMUNICATIONS: If no contact with departure control within 3 minutes after departure, climbing right turn direct SEA VORTAC, climb in SEA VORTAC holding pattern (E, left turn 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight before proceeding enroute.

KENT FOUR DEPARTURE

(KENTT4.KENTT) 10210

SEATTLE, WASHINGTON  
SEATTLE/BOEING FIELD/KING COUNTY INTL (BFI)

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

LOC/DME I-BFI <b>110.9</b> Chan 46	APP CRS <b>130°</b>	Rwy Idg TDZE Apt Elev	<b>9120</b> <b>18</b> <b>21</b>
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## LOC/DME RWY 13R

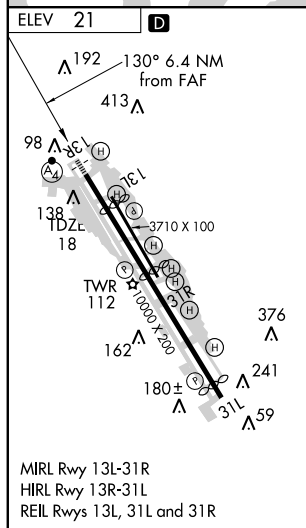
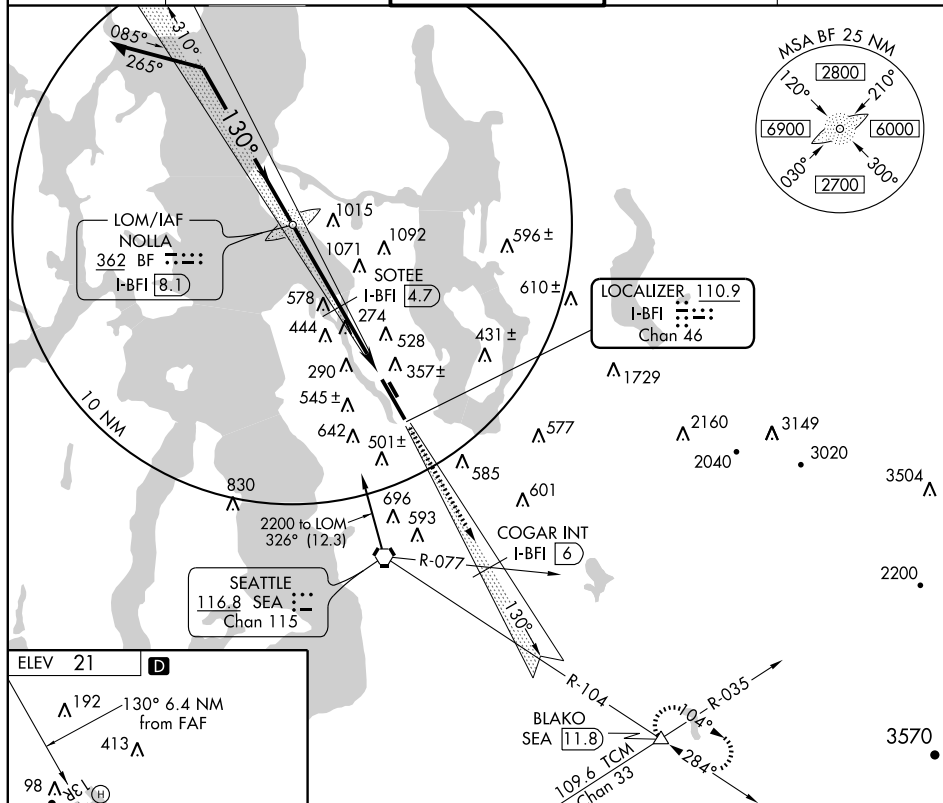
SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)

**▼** Inoperative table does not apply. Visibility reduction by helicopters NA. Front course unusable beyond 20 degrees left of course.

MALSF  
**A4**

MISSED APPROACH: Climb to 2000 via I-BFI SE course to COGAR/I-BFI 6 DME/SEA R-077, then continue climb to 6400 via I-BFI SE course and SEA R-104 to BLAKO Int/SEA 11.8 DME and hold, continue climb-in-hold to 6400.

ATIS <b>127.75</b>	SEATTLE APP CON <b>119.2 284.7</b>	BOEING TOWER <b>120.6 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>132.4</b>
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Remain within 10 NM	NOLLA LOM I-BFI 8.1		2000 I-BFI SE crs	COGAR I-BFI 6	6400 I-BFI SE crs	SEA R-104	BLAKO △
2200	310°	2200	SOTEE I-BFI 4.7		3.12° TCH 75	I-BFI 1.7	
VGSI and descent angles not coincident.	1080		3.4 NM		3 NM		
CATEGORY	A	B	C	D			
S-LOC 13R	560/50	542 (600-1)	560-1½ 542 (600-1½)	560-1¾ 542 (600-1¾)			
CIRCLING	780-1 759 (800-1)	840-1¼ 819 (900-1¼)	900-2½ 879 (900-2½)	960-3 939 (1000-3)			

## NEEDLE SIX DEPARTURE

SEATTLE/ BOEING FIELD/KING COUNTY INTL (BFI)  
SL-384 (FAA) SEATTLE, WASHINGTON

ATIS 127.75  
CLNC DEL  
132.4  
GND CON  
121.9  
BOEING TOWER  
120.6 257.8  
SEATTLE DEP CON  
119.2 284.7

VANCOUVER  
115.9 YVR   
Chan 106  
N49°04.64'-W123°08.95'  
L-1, H-1

CRANBROOK  
112.1 YXC   
Chan 58  
N49°33.30'-W116°05.27'  
H-1

WHATCOM  
113.0 HUH   
Chan 77  
N48°56.72'-W122°34.76'  
L-1, H-1

## TAKE-OFF OBSTACLES:

192' Flagpole  
350' Tower

## DEPARTURE OBSTACLES:

1071' Building  
578' Towers

VICTORIA  
113.7 YYJ   
Chan 84  
N48°43.62'-W123°29.06'  
L-1, H-1

SEATTLE  
116.8 SEA   
Chan 115  
N47°26.12'-W122°18.58'  
L-1, H-1

HOQUIAM  
117.7 HQM   
Chan 124  
N46°56.82'-W124°08.96'  
L-1, H-1

PAINE  
110.6 PAE   
Chan 43  
N47°55.19'-W122°16.66'  
L-1

WENATCHEE  
111.0 EAT   
Chan 47  
N47°23.98'-W120°12.65'  
L-13

MOSES LAKE  
115.0 MWH   
Chan 97  
N47°12.65'-W119°19.01'  
L-13, H-1

OLYMPIA  
113.4 OLM   
Chan 81  
N46°58.30'-W122°54.11'  
L-1, H-1

BATTLE GROUND  
116.6 BTG   
Chan 113  
N45°44.87'-W122°35.49'  
L-1, H-1

YAKIMA  
116.0 YKM   
Chan 107  
N46°34.22'-W120°26.68'  
L-13, H-1

ELLENSBURG  
117.9 ELN   
Chan 126  
N47°01.46'-W120°27.51'  
L-13

TAKE-OFF Rwy 31L/R: Standard with a minimum climb of 350' per NM to 1300'.

NOTE: No right turns authorized until leaving 1300'.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RUNWAYS 31L/R:** Climb runway heading, expect radar vectors to assigned route/fix. Maintain 2000 or ATC assigned altitude, expect clearance to filed altitude within 3 minutes after departure.

**LOST COMMUNICATIONS:** If no contact with departure control within 3 minutes after departure, climbing left turn direct SEA VORTAC, climb in SEA VORTAC holding pattern (E, left turn 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight before proceeding enroute.

## OLYMPIA SIX ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON

SEATTLE APP CON

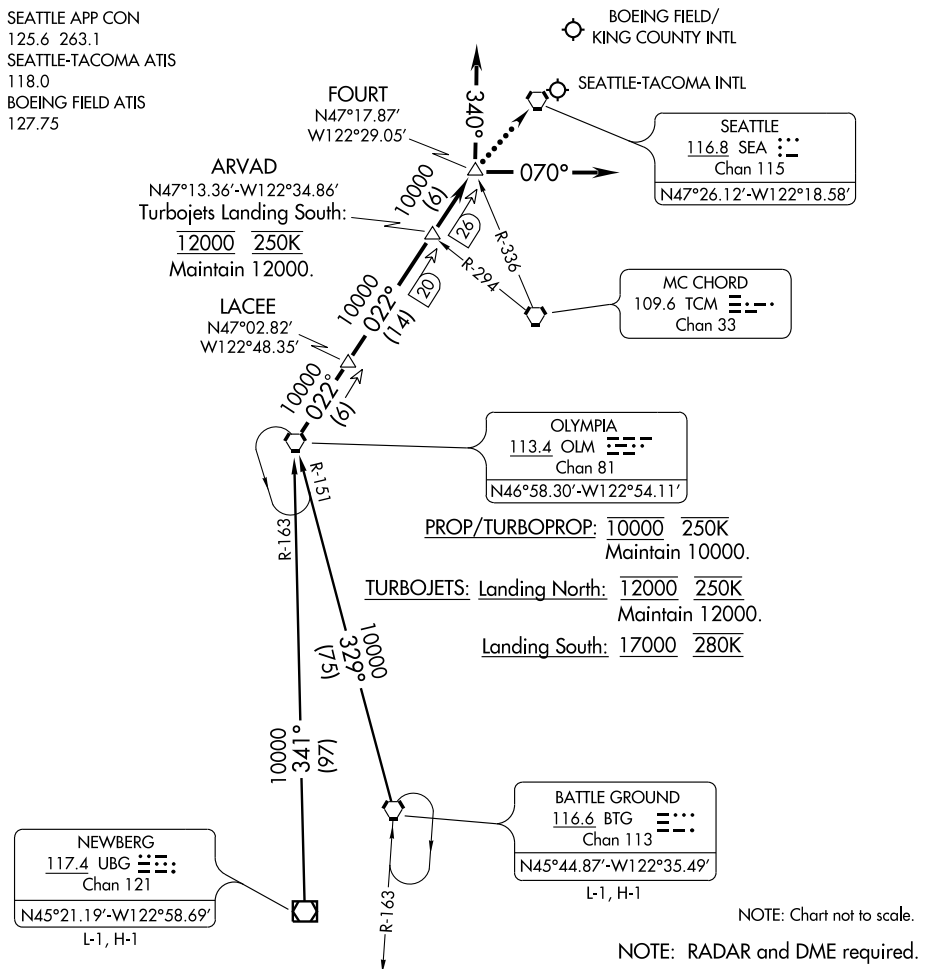
125.6 263.1

SEATTLE-TACOMA ATIS

118.0

BOEING FIELD ATIS

127.75



**BATTLE GROUND TRANSITION (BTG.OLM6):** From over BTG VORTAC via BTG R-329 and OLM R-151 to OLM VORTAC. Thence....

**NEWBERG TRANSITION (UBG.OLM6):** From over UBG VOR/DME via UBG R-341 and OLM R-163 to OLM VORTAC. Thence....

....From over OLM VORTAC via OLM R-022 to LACEE/OLM 6 DME, then via OLM R-022 to ARVAD INT/OLM 20 DME, then via OLM R-022 to FOURT INT/OLM 26 DME, thence...

**LANDING NORTH:** Depart FOURT INT/OLM 26 DME heading 070° for vectors to final approach course.

**LANDING SOUTH:** Depart FOURT INT/OLM 26 DME heading 340° for vectors to final approach course.

**LOST COMMUNICATIONS:** From over FOURT INT/OLM 26 DME, proceed direct SEA VORTAC.

## OLYMPIA SIX ARRIVAL

(OLM.OLM6) 08045

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	<b>9120</b>
<b>130°</b>	TDZE	<b>18</b>
	Apt Elev	<b>21</b>

**RNAV (GPS) Y RWY 13R**

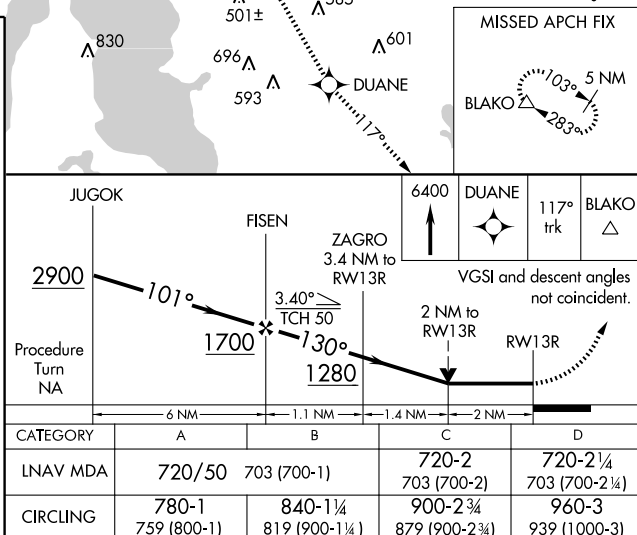
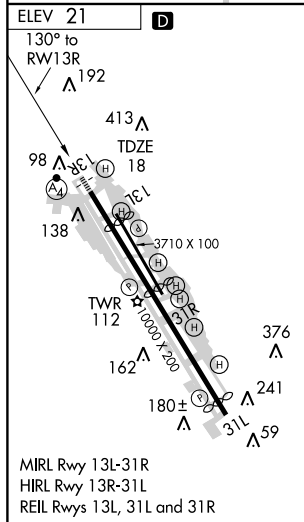
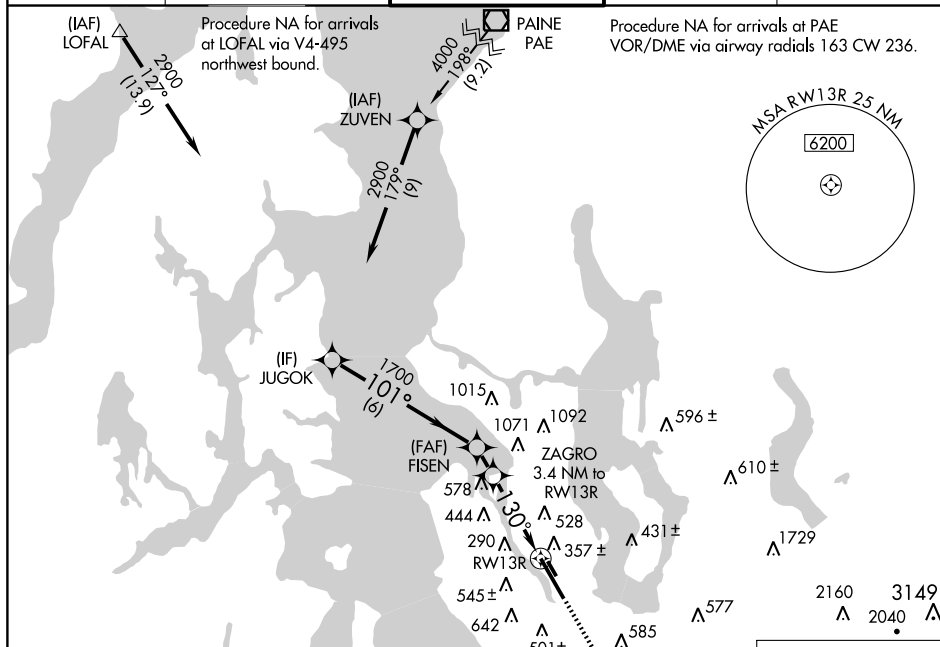
SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)

**▼** Circling to Rwy 13L/31R NA at night.  
**▲** Inoperative table does not apply. DME/DME RNP -0.3 NA.  
 Visibility reduction by helicopters NA.

MAISF

MISSED APPROACH: Climb to 6400 direct DUANE and via 117° track to BLAKO and hold, continue climb-in-hold to 6400.

ATIS <b>127.75</b>	SEATTLE APP CON <b>119.2 284.7</b>	BOEING TOWER <b>120.6 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>132.4</b>
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SEATTLE, WASHINGTON

Orig-C 10154

SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)

47°32'N - 122°18'W

**RNAV (GPS) Y RWY 13R**

APP CRS	Rwy Idg	<b>9120</b>
<b>130°</b>	TDZE	<b>18</b>
	Apt Elev	<b>21</b>

## RNAV (RNP) Z RWY 13R

SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)

**T** GPS and RF required. For uncompensated Baro-VNAV systems, procedure NA below -3°C (26°F) or above 48°C (119°F).  
**A** For inoperative MALSF, increase RNP 0.15 visibility to 1¾, RNP 0.30 to 2¼.

MALSF

**MISSED APPROACH:** Climb to 2000 via 130° track to DUANE then climb to 6400 via 117° track to BLAKO and hold. Continue climb-in-hold to 6400.

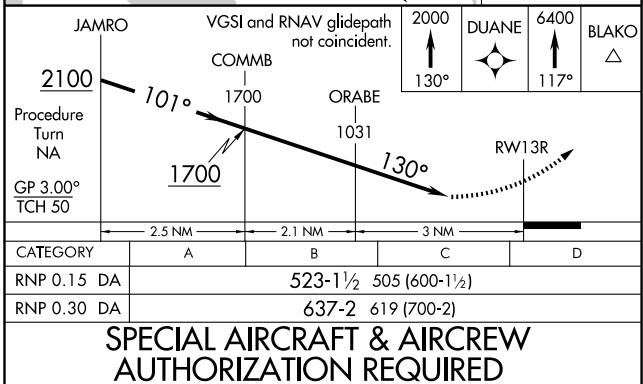
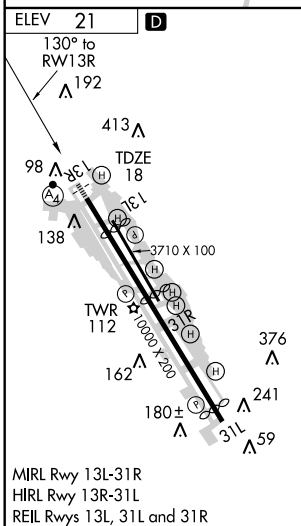
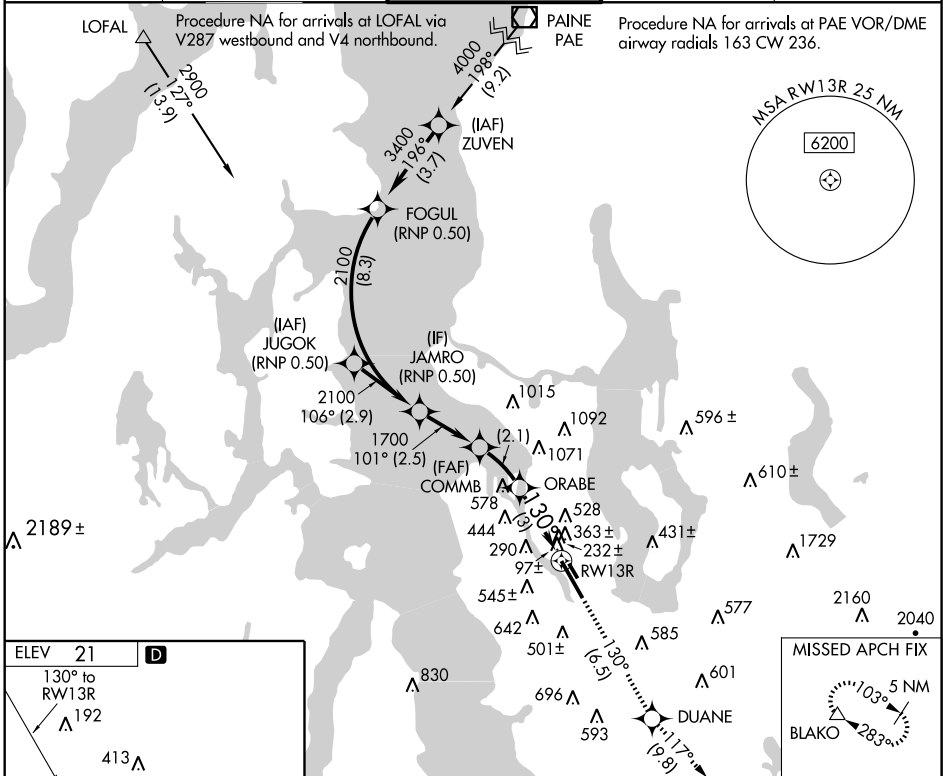
ATIS  
127.75

SEATTLE APP CON  
119.2 284.7

BOEING TOWER  
**120.6 257.8**

GND CON  
**121.9**

CLNC DEL  
**132.4**



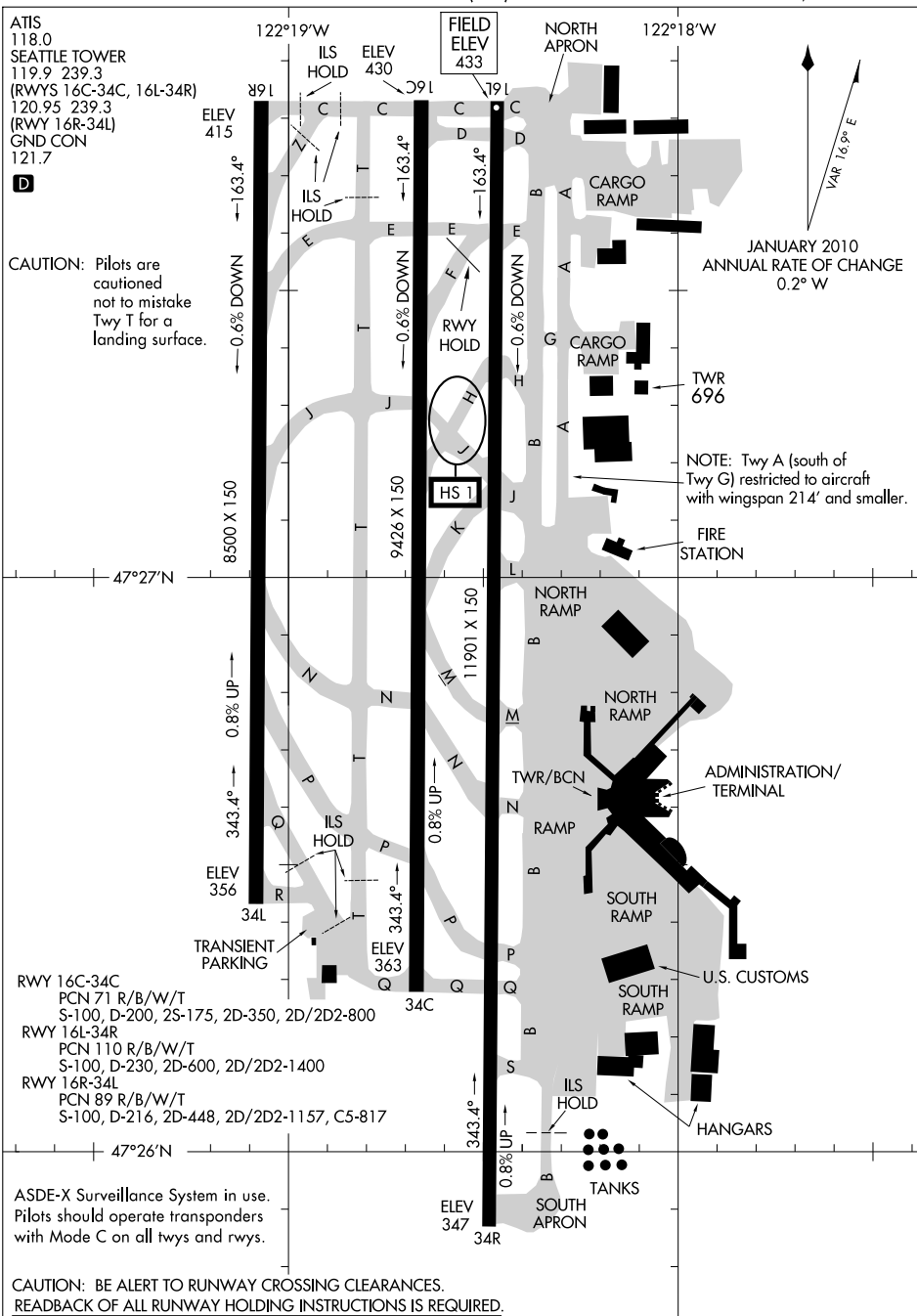
SEATTLE, WASHINGTON  
Orig-B 10154

SEATTLE / BOEING FIELD/KING COUNTY INTL (BFI)  
47°32'N - 122°18'W **RNAV (RNP) Z RWY 13R**

RNAV (RNP) Z RWY 13R

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010





**KENMORE AIR HARBOR SPB** (W55) 1 N UTC-8(-7DT) N47°37.74' W122°20.32'

SEATTLE

14 FUEL 100LL, JET A AOE NOTAM FILE SEA

WATERWAY 18-34: 5000X500 (WATER)

**SEAPLANE REMARKS:** Attended dawn-dusk. Fuel avbl emergency only. Night landings not recommended due to unlighted small watercraft. Red buoy indicates start and stop area for tkfs and ldgs. Increased boating ops on lake Apr 15 thru Oct 15. All tkf and ldg in center of lake. Special noise abatement rules in effect ctc operator for pattern information. Do not taxi closer than 200' from shoreline except in close proximity to Kenmore Air Harbor. Call 425-486-1257 X2010 for approval at least 3 hrs prior to arrival. Docking fee. Flight Notification Service (ADCUS) available.

**COMMUNICATIONS:** CTAF 122.9

**SEATTLE SEAPLANES SPB** (ØWØ) 1 N UTC-8(-7DT) N47°37.66' W122°19.91'

SEATTLE

14 S2 NOTAM FILE SEA

WATERWAY 18-36: 9500X300 (WATER)

**SEAPLANE REMARKS:** Attended 1600Z±-dusk. Small watercraft activity on lake.

**COMMUNICATIONS:** CTAF 122.9

**SEATTLE-TACOMA INTL** (SEA) 10 S UTC-8(-7DT) N47°26.99' W122°18.71'

SEATTLE

433 B FUEL 100LL, JET A, A1 LRA Class I, ARFF Index E NOTAM FILE SEA

H-1B, L-1D

**RWY 16L-34R:** H11901X150 (CONC-GRVD) S-100, D-230, 2D-600, 2D/2D2-1400

IAP, AD

PCN 110 R/B/W/T HIRL CL

**RWY 16L:** ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 79'. 0.6% down.

**RWY 34R:** TDZL. MALSR. PAPI(P4L)—GA 2.75° TCH 82'. 0.8% up.

**RWY 16C-34C:** H9426X150 (CONC-GRVD) S-100, D-200, 2S-175,

2D-350, 2D/2D2-800 PCN 71 R/B/W/T HIRL CL

**RWY 16C:** ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 76'. 0.6% down.

**RWY 34C:** MALSR. PAPI(P4L)—GA 3.0° TCH 62'. Tree. 0.8% up.

**RWY: 16R-34L** H8500X150 (CONC-GRVD) S-100, D-216, 2D-448,

2D/2D2-1157, C5-817 PCN 89 R/B/W/T HIRL CL

**RWY 16R:** ALSF2. TZL. PAPI(P4R)—GA 3.0° TCH 69'. 0.6% down.

**RWY 34L:** MALSR. PAPI(P4L)—GA 3.0° TCH 75'. 0.8% up.

**RUNWAY DECLARED DISTANCE INFORMATION:**

**RWY 16L:** TORA-11901 TODA-11901 ASDA-11901 LDA-11901

**RWY 16C:** TORA-9426 TODA-9426 ASDA-9426 LDA-9426

**RWY 16R:** TORA-8500 TODA-8500 ASDA-8500 LDA-8500

**RWY 34L:** TORA-8500 TODA-8500 ASDA-8500 LDA-8500

**RWY 34C:** TORA-9426 TODA-9426 ASDA-9426 LDA-9426

**RWY 34R:** TORA-11901 TODA-11901 ASDA-11901 LDA-11901

**AIRPORT REMARKS:** Attended continuously. Bird flocks within airport

vicinity—check local advisories. Helicopters ldg and departing avoid overflying fuel farm located at the SE corner of the arpt. ASDE-X surveillance system in use: pilots should operate transponders with mode C on all twys and rwys. Do not mistake Twy T for landing sfc. Twy A south of Twy G restricted to acft with wingspan 225' and smaller. Taxilane around N satellite restricted to acft with wingspans of 200' or less except for gates N7-N9. Access to air cargo 4 parking and cargo areas rstd to acft with wingspans of 118' or less. Twy for corporate hangar ramp ltd to acft with 104' or less wingspan for taxi ops. GA customs parking is very limited. PPR for all general aviation parking and svc, ctc 206-433-5481. Between the hours of 0600-1500Z±, the use of extdd reverse thrust is discouraged byd what is necessary for opr or safety reasons. NS ABTMT procedures in effect between 0600-1400Z±. For further information ctc SEA NS ABTMT office at 206-787-7496. Touchdown, midpoint and rollout runway visual range avbl Rwy 16C, Rwy 34C, Rwy 16L, Rwy 34R, Rwy 16R, and Rwy 34L. Landing fee. Flight Notification Service (ADCUS) available. NOTE: See Special Notices—Seattle-Tacoma Intl Gatehold Procedures, Oceanic Departures.

**WEATHER DATA SOURCES:** ASOS (206) 431-2834.

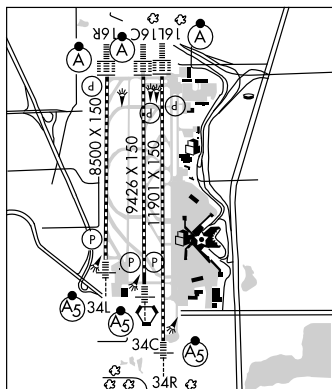
**COMMUNICATIONS:** D-ATIS 118.0 (206) 241-6025 UNICOM 122.95

① **SEATTLE APP CON** 120.1 (199°-300°) 120.4 (301°-340° Rwy 34) 125.6 (West) 125.9 (076°-160° Rwy 34) (301°-340° Rwy 16) 126.5 (161°-198°) 133.65 (ARR Rwy 16) 123.9

① **SEATTLE DEP CON** 119.2 (DEP Rwy 16) 120.1 (199°-300°) 120.4 (301°-340° Rwy 34) 125.6 (West) 125.9 (076°-160° Rwy 34) (301°-340° Rwy 16) 126.5 (161°-198°) 123.9

**SEATTLE TOWER** 119.9 (Rwy 16L-34R, Rwy 16C-34C) 120.95 (Rwy 16R-34L) **GND CON** 121.7 126.87 (Cargo north ramp) 122.27 (South ramp) **CLNC DEL** 128.0

**AIRSPACE:** CLASS B See VFR Terminal Area Chart.



CONTINUED ON NEXT PAGE

## CONTINUED FROM PRECEDING PAGE

## RADIO AIDS TO NAVIGATION: NOTAM FILE SEA.

(H) VORTACW 116.8 SEA Chan 115 N47°26.12' W122°18.58' at fld. 354/19E.  
 ILS/DME 110.75 I-CJL Chan 44(Y) Rwy 16R. Class IIIE.  
 ILS/DME 110.75 I-BEJ Chan 44(Y) Rwy 34L. Class IIE.  
 ILS/DME 110.3 I-SEA Chan 40 Rwy 34R. Class IID. DME also serves ILS Rwy 16L.  
 ILS/DME 111.7 I-SZI Chan 54 Rwy 16C. Class IIIE. DME also serves ILS Rwy 34C. LOC front course unusable byd 10 NM, blo 2,500'.  
 ILS/DME 110.3 I-SNQ Chan 40 Rwy 16L. Class IIIE. Localizer unusable byd 15° left of course, byd 14 NM blo 3,000'. DME also serves ILS Rwy 34R. Possible Rwy 16L glideslope fluctuation on final when wx is 800/2 or better. Possible Rwy 16L glideslope fluctuation prior to DGLAS when wx is less than 800/2.  
 ILS/DME 111.7 I-TUC Chan 54 Rwy 34C. Class IIE. DME also serves ILS Rwy 16C.

**SEKIU** (11S) 0 NW UTC-8(-7DT) N48°15.97' W124°18.84'

SEATTLE

355 B NOTAM FILE SEA

RWY 08-26: H2997X50 (ASPH) LIRL

RWY 08: Thld dsplcd 900'. Hill.

RWY 26: VASI(V2L)—GA 4.0° TCH 35' (nights only). Tree.

**AIRPORT REMARKS:** Unattended. Deer on and in vicinity of arpt Sep-Mar. High ridge along N side of rwy. Turbulence on E end apch over water. Difficult apch when wind from N. PPR for other than single engine acft, call arpt manager 360-457-1138. Rwy 08-26 poor subsurface drainage during wet weather conditions causes rwy surface movements.

**COMMUNICATIONS:** CTAF 122.9

**SEQUIM VALLEY** (W28) 4 NW UTC-8(-7DT) N48°05.89' W123°11.23'

SEATTLE

L-1E

144 B S6 FUEL 100LL NOTAM FILE SEA

RWY 09R-27L: H3510X40 (ASPH) LIRL

RWY 09R: Trees. Rgt tfc.

RWY 27L: Trees.

RWY 09L-27R: 3500X100 (TURF)

RWY 09L: Fence. Rgt tfc.

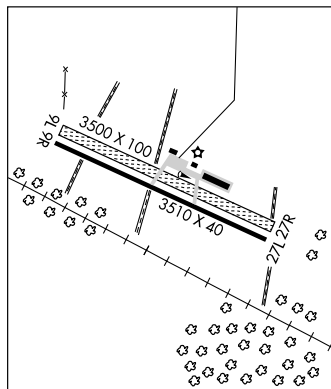
RWY 27R: Trees.

**AIRPORT REMARKS:** Attended 1700-0100Z. Deer on and in the vicinity of arpt. Rwy 09L fence covered with 5' shrubs. Rwy 09L-27R PPR for landing call 360-683-4444. Rwy 09R-27L has a 6" shoulder. Rwy 27L marked with broken line. Paved twys cross turf Rwy 09L-27R.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SEA.

TATOOSH (H) VORTACW 112.2 TOU Chan 59 N48°17.99' W124°37.62' 079° 59.1 NM to fld. 1652/22E. HIWAS.

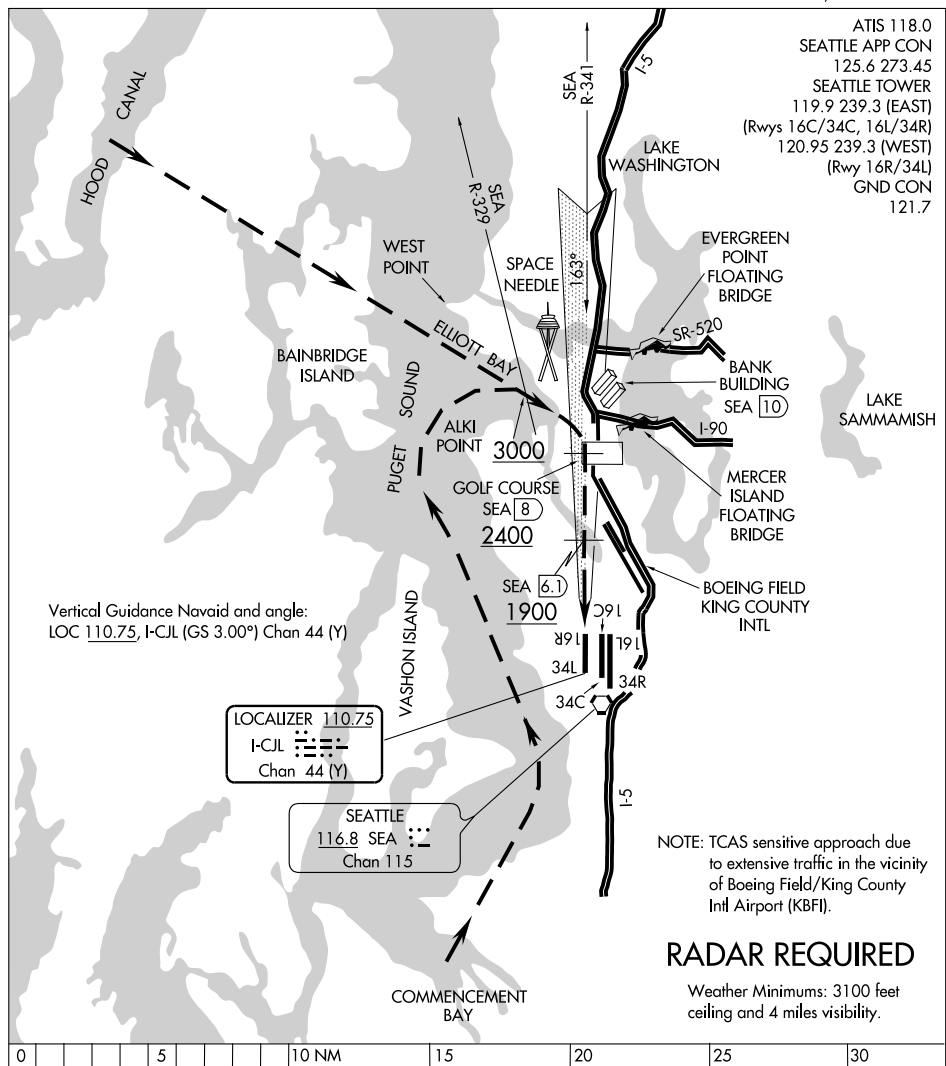


## ALKI VISUAL RWY 16R

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)

SEATTLE, WASHINGTON



## ALKI VISUAL APPROACH RWY 16R

When the ceiling is at least 3100' and visibility is at least 4 miles, aircraft may be vectored over Puget Sound for an ALKI Visual Runway 16R Approach. When cleared for an ALKI Visual Approach: proceed inbound visually over the middle of Elliott Bay (via route depicted); intercept the Runway 16R Localizer/SEA R-341 on Runway 16R extended centerline at the golf course (8 DME) and complete a straight in visual approach to the airport. On final approach, a descent profile of approximately 300' per mile may be made with reference to the altitudes shown at the visual checkpoints or associated DME/fix positions.

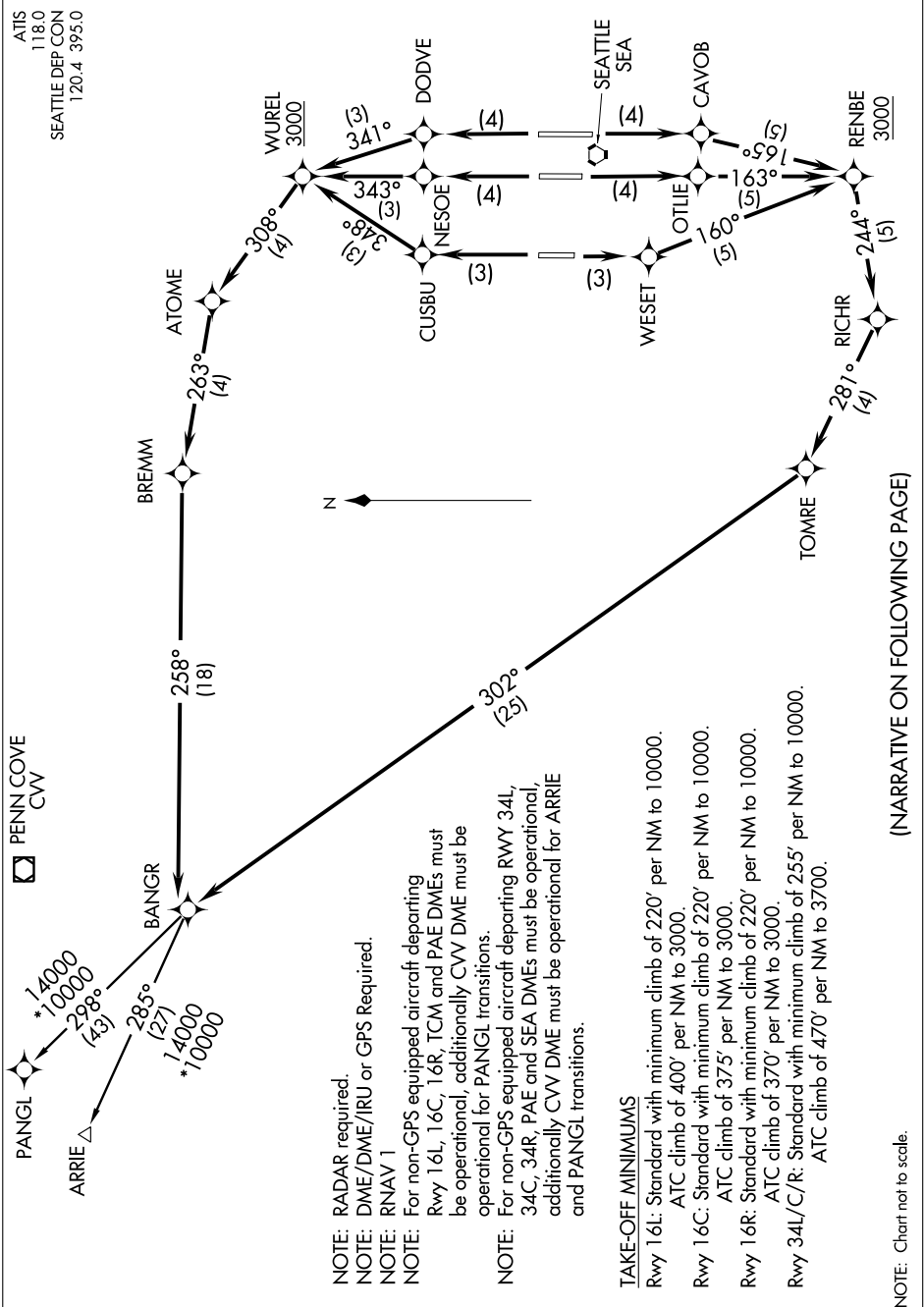
## ALKI VISUAL RWY 16R

47°27'N-122°19'W

SEATTLE, WASHINGTON

SEATTLE-TACOMA INTL (SEA)

# BANGR SIX DEPARTURE (RNAV)



# BANGR SIX DEPARTURE (RNAV)

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

## BANGR SIX DEPARTURE (RNAV)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb direct CAVOB, then via 165° track to cross RENBE at or above 3000, then via depicted route to BANGR, thence. . . .

TAKE-OFF RUNWAY 16C: Climb direct OTLIE, then via 163° track to cross RENBE at or above 3000, then via depicted route to BANGR, thence. . . .

TAKE-OFF RUNWAY 16R: Climb direct WESET, then via 160° track to cross RENBE at or above 3000, then via depicted route to BANGR, thence. . . .

TAKE-OFF RUNWAY 34L: Climb direct CUSBU, then via 348° track to cross WUREL at or above 3000, then via depicted route to BANGR, thence. . . .

TAKE-OFF RUNWAY 34C: Climb direct NESOE, then via 343° track to cross WUREL at or above 3000, then via depicted route to BANGR, thence. . . .

TAKE-OFF RUNWAY 34R: Climb direct DODVE, then via 341° track to cross WUREL at or above 3000, then via depicted route to BANGR, thence. . . .

. . . . via (transition). Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

ARRIE TRANSITION (BANGR6.ARRIE)

PANGL TRANSITION (BANGR6.PANGL)

TAKE-OFF OBSTACLE NOTES

Rwy 16L: Trees beginning 2908' from DER, 1064' right of centerline, up to 100' AGL/476' MSL.

Rwy 16C: Trees beginning 4477' from DER, 484' right of centerline, up to 100' AGL/507' MSL.

Rwy 16R: Trees, antenna on building and light pole beginning 488' from DER, 436' left of centerline, up to 100' AGL/507' MSL. Trees beginning 1137' from DER, 587' right of centerline, up to 100' AGL/468' MSL.

Rwy 34L: Fence 189' from DER, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from DER, 857' left of centerline, up to 100' AGL/522' MSL.

NW-1, 21 OCT 2010 to 18 NOV 2010

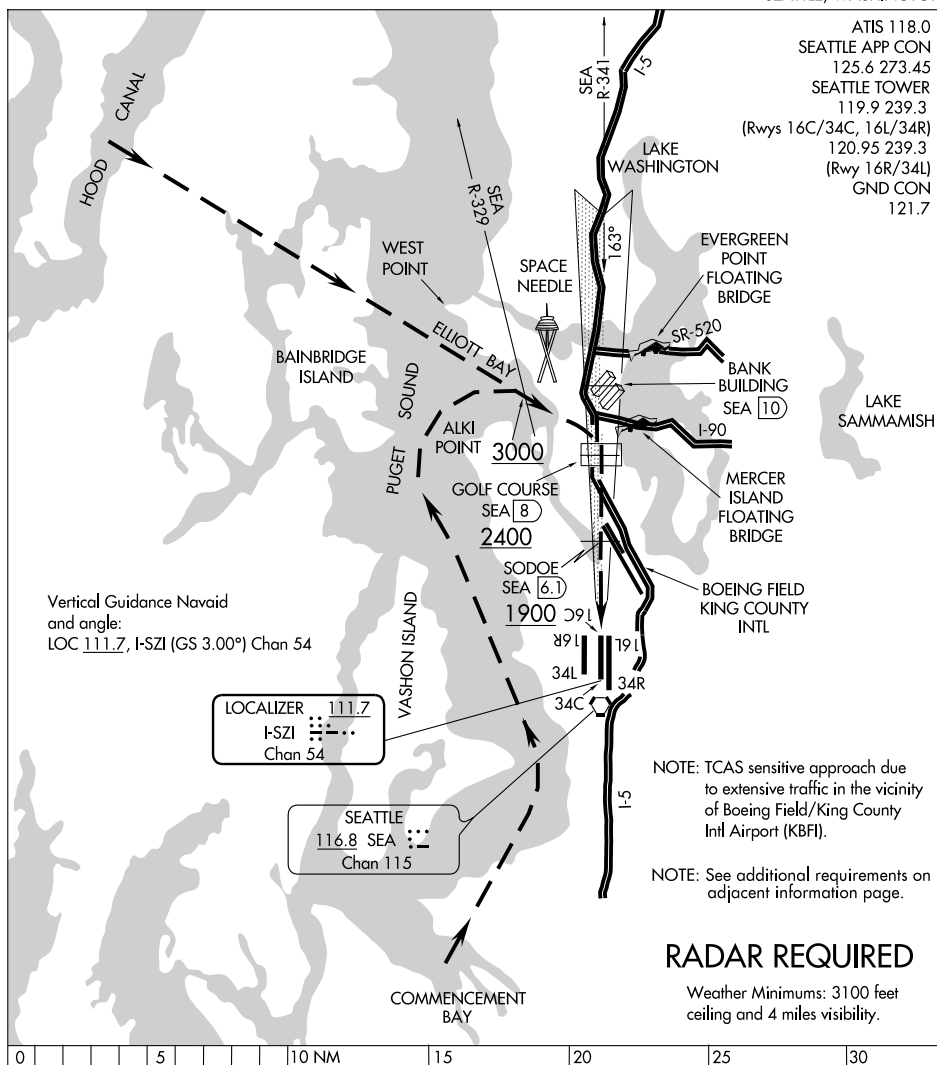
NW-1, 21 OCT 2010 to 18 NOV 2010

## BAY VISUAL RWY 16C

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)

SEATTLE, WASHINGTON



## BAY VISUAL APPROACH RWY 16C

When the ceiling is at least 3100' and visibility is at least 4 miles, aircraft may be vectored over Puget Sound for a Bay Visual Runway 16C Approach. When cleared for a Bay Visual Approach: proceed inbound visually over the middle of Elliott Bay (via route depicted); intercept the Runway 16C Localizer/SEA R-341 on Runway 16C extended centerline at the golf course (8 DME) and complete a straight in visual approach to the airport. On final approach, a descent profile of approximately 300' per mile may be made with reference to the altitudes shown at the visual checkpoints or associated DME/fix positions.

## BAY VISUAL RWY 16C

47°27'N-122°19'W

SEATTLE, WASHINGTON

SEATTLE-TACOMA INTL (SEA)

SEATTLE-TACOMA INTL AIRPORT**ALERT NOTICE****ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

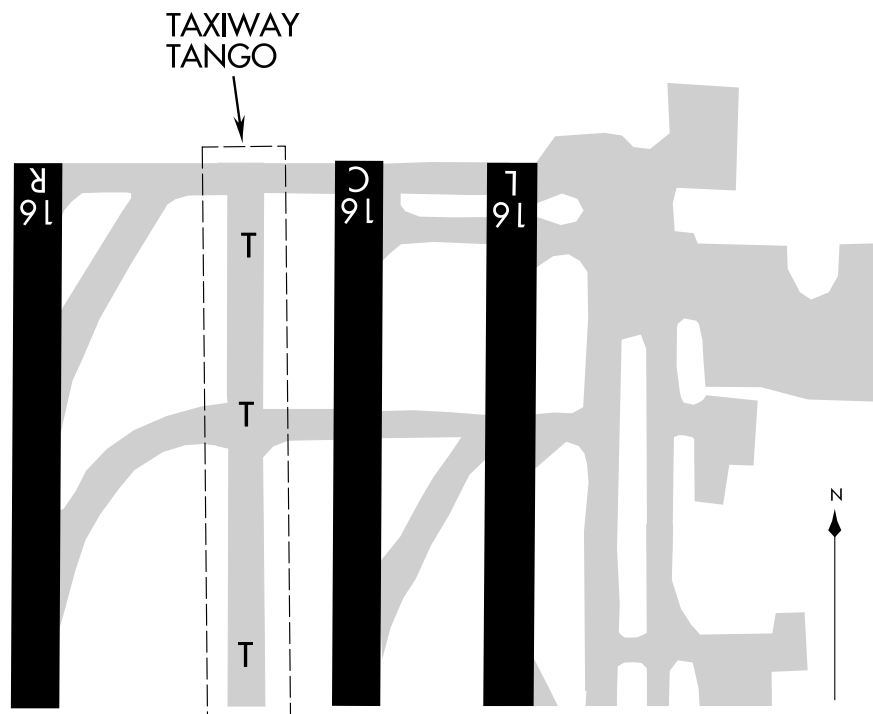
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify that you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended to track the localizer until the runway environment is visually verified.



NW-1, 21 OCT 2010 to 18 NOV 2010

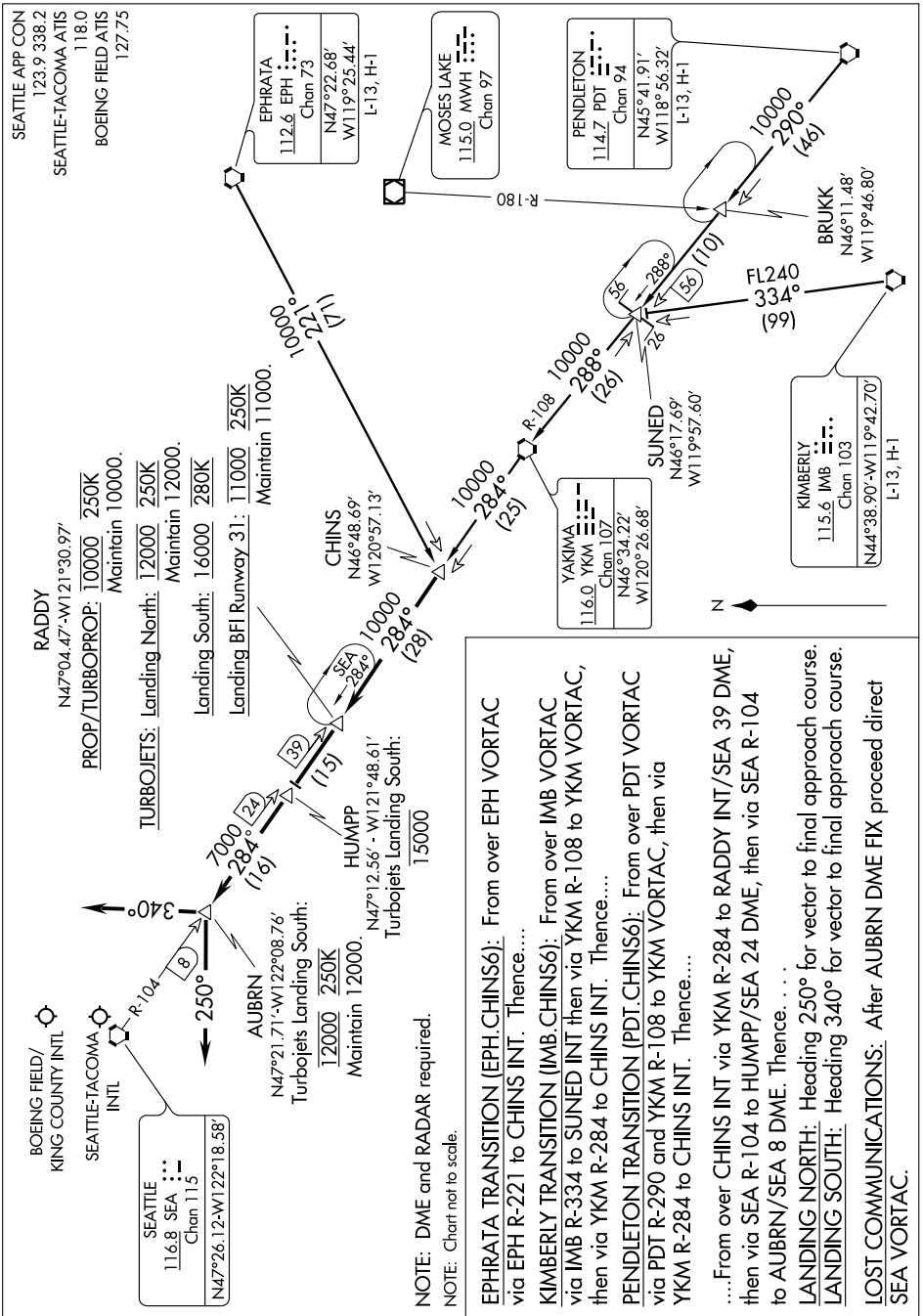
NW-1, 21 OCT 2010 to 18 NOV 2010

CHINS SIX ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



CHINS SIX ARRIVAL

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010

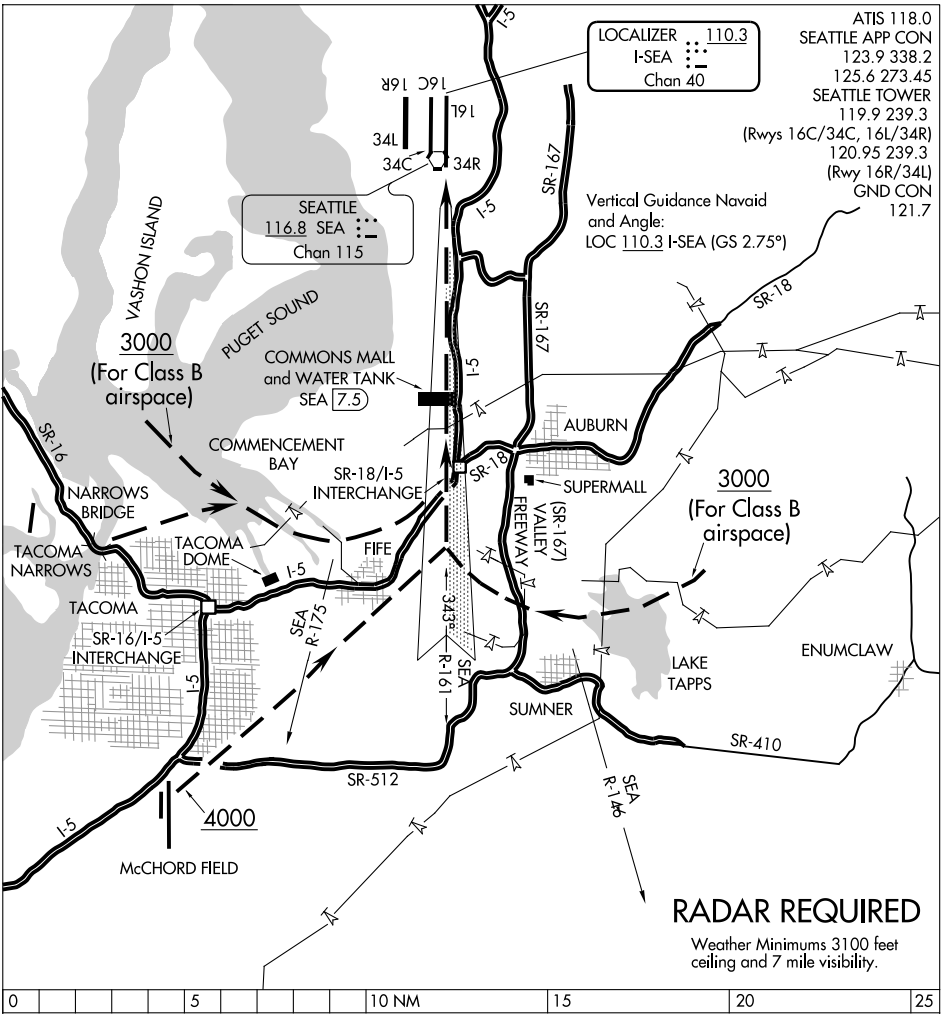


# COMMONS VISUAL RWY 34R

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)

SEATTLE, WASHINGTON



## COMMONS VISUAL APPROACH RWY 34R

When the ceiling is at least 3100' and visibility is at least 7 miles, aircraft may be vectored towards Commencement Bay or McChord Field or Lake Tapps for a Commons Visual Runway 34R Approach. When cleared for this approach; proceed inbound visually using the depicted landmarks to the centerline of runway 34R. Turn final before or over the interchange of State Road 18 (SR-18) and Interstate 5. Be established on the localizer or runway centerline at the Commons Mall and Water Tank (7.5 DME) and proceed visually to the runway.

# COMMONS VISUAL RWY 34R

47°27'N-122°19'W

SEATTLE, WASHINGTON

SEATTLE-TACOMA INTL (SEA)

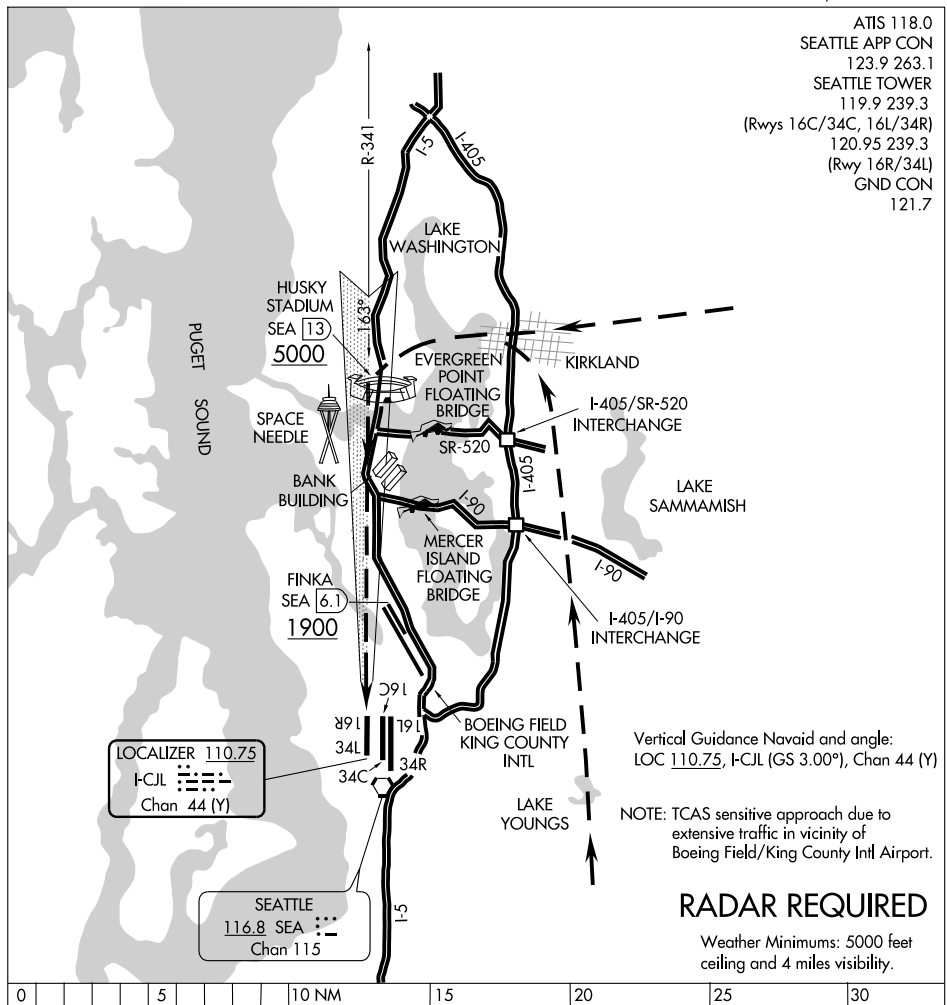
## DAWG VISUAL RWY 16R

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



## DAWG VISUAL APPROACH RWY 16R

When the ceiling is at least 5000' and visibility is at least 4 miles, aircraft may be vectored over Kirkland or Lake Youngs for a Dawg Visual Runway 16R Approach. When cleared for a Dawg Visual Approach; proceed inbound visually over Husky Stadium (via route depicted); intercept the Runway 16R localizer/SEA R-341 at 13 DME and complete a straight in visual approach to the airport.

## DAWG VISUAL RWY 16R

47°27'N-122°19'W

SEATTLE, WASHINGTON

SEATTLE-TACOMA INTL (SEA)

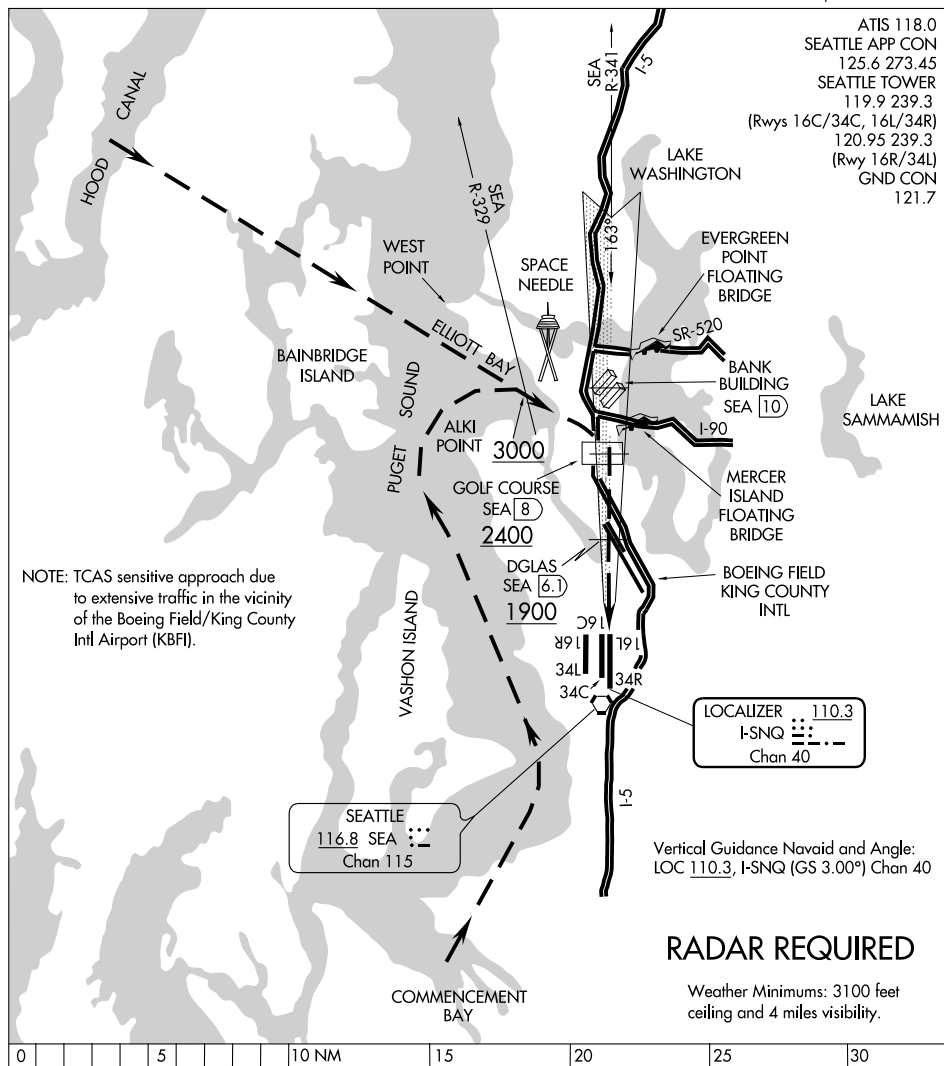
NW-1, 21 OCT 2010 to 18 NOV 2010

## ELLIOTT VISUAL RWY 16L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)

SEATTLE, WASHINGTON



## ELLIOTT VISUAL APPROACH RWY 16L

When the ceiling is at least 3100' and visibility is at least 4 miles, aircraft may be vectored over Puget Sound for an Elliott Visual Runway 16L Approach. When cleared for an Elliott Visual Approach: proceed inbound visually over the middle of Elliott Bay (via route depicted); intercept the 16L Localizer/SEA R-341 on Runway 16L extended centerline at the golf course (8 DME) and complete a straight in visual approach to the airport. On final approach, a descent profile of approximately 300' per mile may be made with reference to the altitude shown at the visual checkpoints or associated DME/fix positions.

## ELLIOTT VISUAL RWY 16L

47°27'N-122°19'W

SEATTLE, WASHINGTON

SEATTLE-TACOMA INTL (SEA)

## ELMAA EIGHT DEPARTURE

SL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)  
SEATTLE, WASHINGTON

ATIS  
118.0  
SEATTLE DEP CON  
120.4 395.0

VICTORIA  
113.7 YYJ  
Chan 84

SEATTLE  
116.8 SEA  
Chan 115  
N47°26.12' - W122°18.58'

NICHY  
N47°21.13'  
W122°18.58'  
3000  
RADAR

ELMAA  
N47°08.88'  
W123°24.57'

TAKE-OFF MINIMUMS

Rwys 34L/C/R: NA

Rwys 16L/C/R: Standard.

Rwy 16L: ATC climb of 560' per NM to 3000.

Rwy 16C: ATC climb of 515' per NM to 3000.

Rwy 16R: ATC climb of 500' per NM to 3000.

TAKE-OFF OBSTACLE NOTES

Rwy 16L: Trees beginning 2908' from DER, 1064' right of centerline, up to 100' AGL/476' MSL.

Rwy 16C: Trees beginning 4477' from DER, 484' right of centerline, up to 100' AGL/507' MSL.

Rwy 16R: Trees, antenna on building and light pole beginning 488' from DER 436' left of centerline, up to 100' AGL/507' MSL. Trees beginning 1137' from DER, 587' right of centerline, up to 100' AGL/468' MSL.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb heading 164° and SEA R-161, thence. . .TAKE-OFF RUNWAYS 16C/R: Climb heading 160° and SEA R-161, thence. . .

. . . to cross NICHY/5 DME/RADAR at or above 3000, then right turn heading 250° to intercept SEA R-230 to ELMAA INT, then via (transition/assigned route), expect filed altitude/flight level 15 NM from SEA.

CORVALLIS TRANSITION (ELMAA8.CVO): From over ELMAA INT via YYJ R-157 and CVO R-340 to CVO VOR/DME.HOQUIAM TRANSITION (ELMAA8.HQM): From over ELMAA INT via HQM R-049 to HQM VORTAC.

## ELMAA EIGHT DEPARTURE

(ELMAA8.ELMAA) 09015

SEATTLE, WASHINGTON  
SEATTLE-TACOMA INTL (SEA)

NW-1, 21 OCT 2010 to 18 NOV 2010

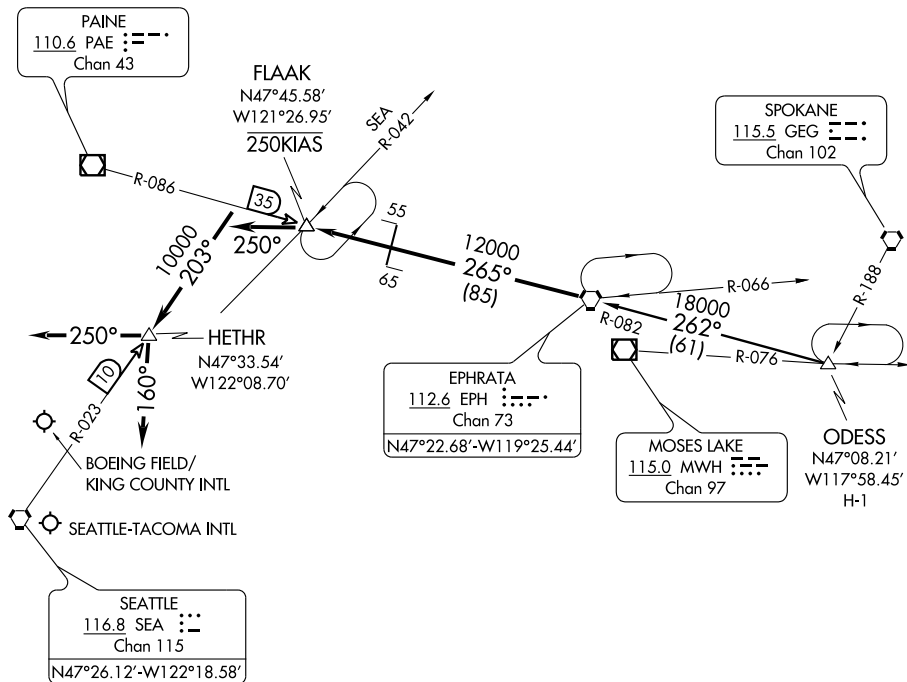
NW-1, 21 OCT 2010 to 18 NOV 2010

## EPHRATA SIX ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON

SEATTLE APP CON  
123.9 338.2  
SEATTLE-TACOMA ATIS  
118.0  
BOEING FIELD ATIS  
127.75



NOTE: DME and RADAR required.

ODESS TRANSITION (ODESS.EPH6): From over ODESS INT via EPH R-082 to EPH VORTAC. Thence....

....From over EPH VORTAC via EPH R-265 and PAE R-086 to FLAAK INT. Then via heading 250° to intercept the SEA R-023, then via SEA R-023 to HETHR DME Fix, thence....

LANDING NORTH: Heading 160° for vectors to final approach course;

LANDING SOUTH: Heading 250° for vectors to final approach course.

LOST COMMUNICATIONS: From over HETHR DME proceed direct SEA VORTAC.

## EPHRATA SIX ARRIVAL

SEATTLE, WASHINGTON

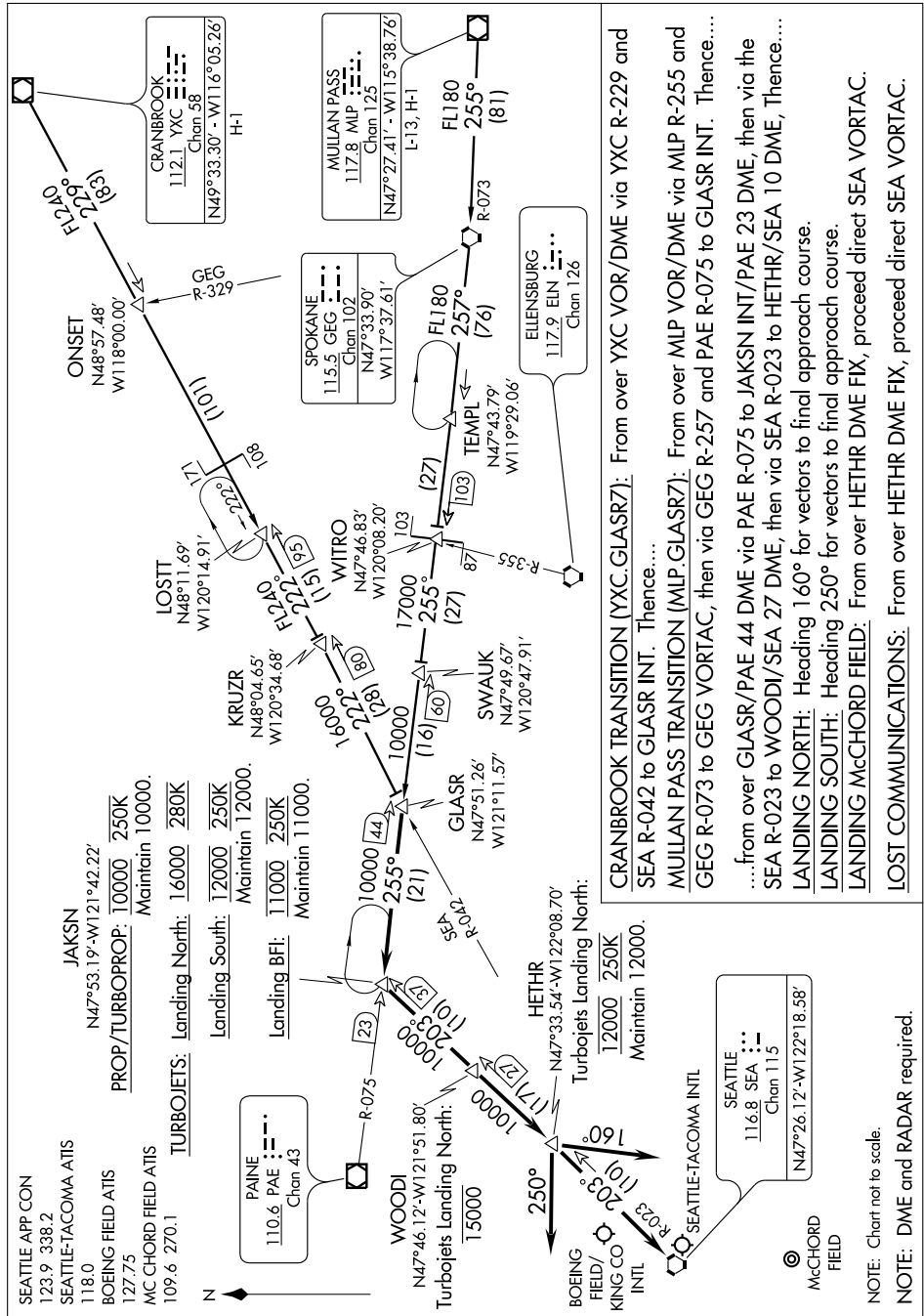
010Z 20Z NOV 2010 1001 12' 1'-MN

# GLASR SEVEN ARRIVAL

10154

ST-582 (FAA)

SEATTLE, WASHINGTON



NW-1, 21 OCT 2010 to 18 NOV 2010

# GLASR SEVEN ARRIVAL

10154

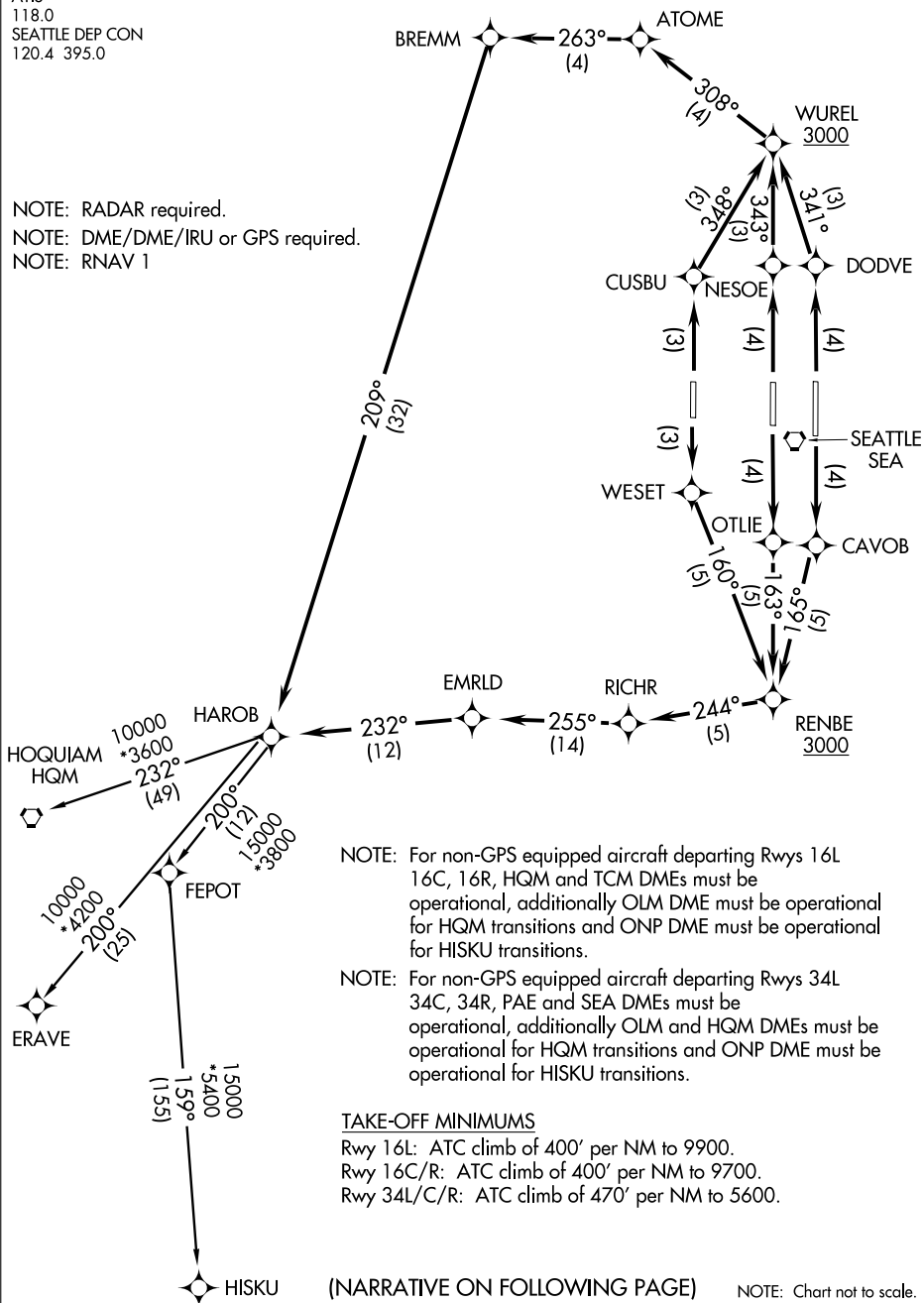
SEATTLE, WASHINGTON

## HAROB THREE DEPARTURE (RNAV)

SEATTLE-TACOMA INTL (SEA)  
SEATTLE, WASHINGTON

ATIS  
118.0  
SEATTLE DEP CON  
120.4 395.0

NOTE: RADAR required.  
NOTE: DME/DME/IRU or GPS required.  
NOTE: RNAV 1



NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

## HAROB THREE DEPARTURE (RNAV)

SEATTLE, WASHINGTON  
SEATTLE-TACOMA INTL (SEA)

## HAROB THREE DEPARTURE (RNAV)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb direct CAVOB, then via 165° track to cross RENBE at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 16C: Climb direct OTLIE, then via 163° track to cross RENBE at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 16R: Climb direct WESET, then via 160° track to cross RENBE at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 34L: Climb direct CUSBU, then via 348° track to cross WUREL at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 34C: Climb direct NESOE, then via 343° track to cross WUREL at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 34R: Climb direct DODVE, then via 341° track to cross WUREL at or above 3000, then via depicted route to HAROB, thence. . . .

. . . . via (transition). Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

ERAVE TRANSITION (HAROB3.ERAVE)

FEPOT TRANSITION (HAROB3.FEPOT)

HISKU TRANSITION (HAROB3.HISKU)

HOQUIAM TRANSITION (HAROB3.HQM)

## TAKE-OFF OBSTACLE NOTES

Rwy 16L: Trees beginning 2908' from DER, 1064' right of centerline, up to 100' AGL/476' MSL.

Rwy 16C: Trees beginning 4477' from DER, 484' right of centerline, up to 100' AGL/507' MSL.

Rwy 16R: Trees, antenna on building and light pole beginning 488' from DER, 436' left of centerline, up to 100' AGL/507' MSL. Trees beginning 1137' from DER, 587' right of centerline, up to 100' AGL/468' MSL.

Rwy 34L: Fence 189' from DER, 401' right of centerline, up to 12' AGL/420' MSL.

Trees beginning 4010' from DER, 857' left of centerline, up to 100' AGL/522' MSL.



## HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
BILLINGS, MT		
BILLINGS LOGAN INTL (BIL)	HS 1	Rwy 28R hold line at an unusual location at east edge of run up area.
	HS 2	Twy H crosses Rwy 07 protected area.
BOISE, ID		
BOISE AIR TERMINAL/GOWEN FLD (BOI)	HS 1	Multiple hold lines visible, left turn at Twy A for departure on Rwy 10L.
CHEYENNE, WY		
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)	HS 1	Confusing twy configuration.
EUGENE, OR		
MAHLON SWEET FIELD (EUG)	HS 1	No access to Rwy 34L past Twy A9.
EVERETT, WA		
SNOHOMISH COUNTY (PAINE FIELD) (PAE)	HS 1	Hold line for Rwy 11-29 on Twy A4 and Twy A5 int are more than 500' wide.
	HS 2	Rwy 29 thr in close proximity to ramp areas.
	HS 3	Twy A between Twy A8 and Twy A9 not visible from ATCT.
GREAT FALLS, MT		
GREAT FALLS INTL (GTF)	HS 1	No Rwy 21 access beyond A1.
	HS 2	A3 aligned with Rwy 25, wrong rwy departure risk.
IDAHO FALLS, ID		
IDAHO FALLS RGNL (IDA)	HS 1	Rwy 17-35 Twy C hold bars.
	HS 2	Twy A1 and Rwy 20 apch hold bar.
	HS 3	Rwy 17 and Twy A hold bar.
LEWISTON, ID		
LEWISTON-NEZ PERCE COUNTY (LWS)	HS 1	Twy C and Twy G int close proximity to Rwy 12-30.
	HS 2	Twy G between Rwy 08-26 and Rwy 30 thr. Short distance between rwys.
PORTLAND, OR		
PORTLAND INTL (PDX)	HS 1	Limited wing-tip clearance at twy convergence point.
SALEM, OR		
MCNARY FLD (SLE)	HS 1	When the ATCT is closed aircraft should not hold at this position if traffic is arriving or departing Rwy 13-31.

(SEE CONTINUATION PAGE FOR MORE LISTINGS)

## HOT SPOTS

(CONTINUED)

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
SEATTLE, WA		
BOEING FIELD/ KING COUNTY INTL (BFI)	HS 1	Twy Z restricted access area.
	HS 2	Rwy 13R-31L and Twy A9. Wrong rwy departure risk.
SEATTLE, WA		
SEATTLE-TACOMA INTL (SEA)	HS 1	Aircraft exiting Rwy 34R via Twy H then Twy J; limited distance between rwy.

\*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

## HUSKY VISUAL RWY 16C

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)

SEATTLE, WASHINGTON

ATIS 118.0

SEATTLE APP CON

123.9 263.1

SEATTLE TOWER

119.9 239.3

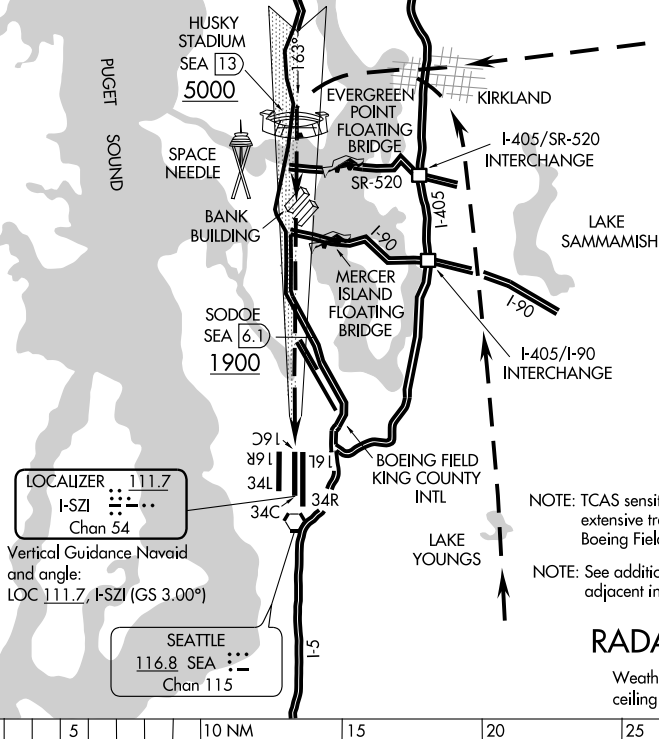
(Rwys 16C/34C, 16L/34R)

120.95 239.3

(Rwy 16R/34L)

GND CON

121.7

HUSKY VISUAL APPROACH RWY 16C

When the ceiling is at least 5000' and visibility is at least 4 miles, aircraft may be vectored over Kirkland or Lake Youngs for a Husky Visual Runway 16C Approach. When cleared for a Husky Visual Approach; proceed inbound visually over Husky Stadium (via route depicted); intercept the Runway 16C localizer/SEA R-341 at 13 DME and complete a straight in visual approach to the airport.

## HUSKY VISUAL RWY 16C

47°27'N-122°19'W

SEATTLE, WASHINGTON

SEATTLE-TACOMA INTL (SEA)

SEATTLE-TACOMA INTL AIRPORT**ALERT NOTICE****ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

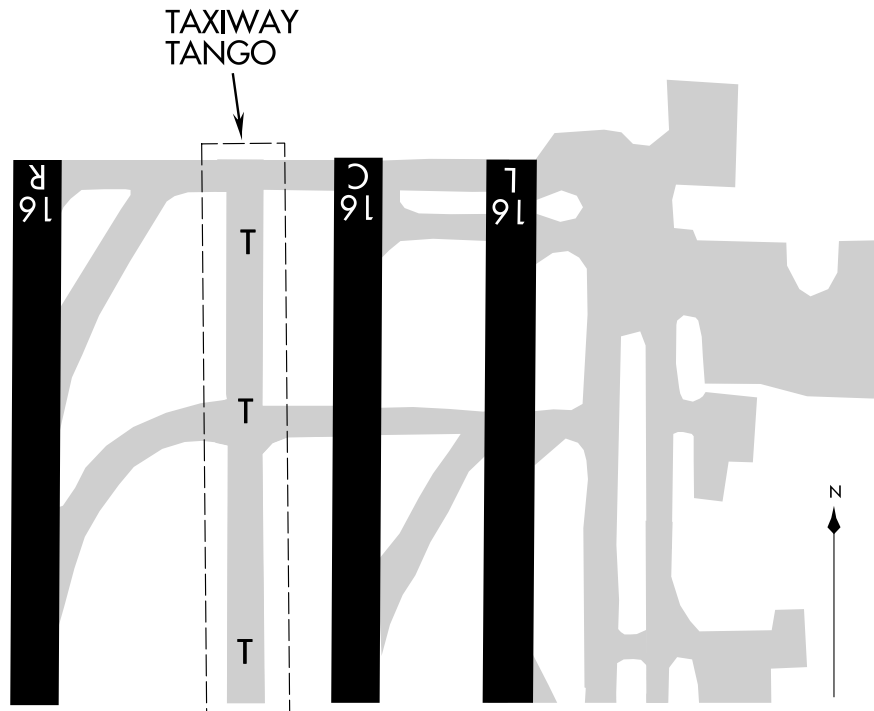
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify that you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended to track the localizer until the runway environment is visually verified.



LOC/DME I-SZI  
**111.7**  
Chgn **54**

APP CRS  
163°

Rwy 16C Idg	<b>9426</b>
TDZE	<b>430</b>
Apt Elev	<b>433</b>

Rwy 16L Idg	<b>11901</b>
TDZE	<b>433</b>
Apt Elev	<b>433</b>

ILS or LOC RWY 16C  
SEATTLE-TACOMA INTL (SEA)

**T** For inoperative ALSF-2, increase S-LOC 16C Cat D visibility to RVR 5000. Inoperative table does not apply to SIDESTEP 16L. DME or RADAR required. See additional requirements on adjacent information page.

ALSF-2  
Rwy 16C/  
 

**MISSED APPROACH:** Climb heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS  
118.0

SEATTLE APP CON  
133.65 273.45

SEATTLE TOWER  
**119.9 239.3** (Rwys 16C/34C, 16L/34R)  
**120.95 239.3** (Rwy 16R/34L)

GND CON  
121.7

## DME or RADAR REQUIRED

IAF  
PAINE  
110.6 PAE ::=-.  
Chan 43

\*6000  
67° (10.9)

Procedure NA for arrivals at PAE  
VOR/DME via V23 northbound.

ALTERNATE MISSED  
APCH FIX

MC CHORD  
TCM  $\equiv \cdot - \cdot$   
109.6  
Chan 33

**MISSED  
APCH  
FIX**

\* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

Procedure Turn NA

WEMAT I-SZI 18.2 RADAR

ERYKA I-SZI 15.3 RADAR

MGNUM I-SZI 12.4 RADAR

ANVIL I-SZI 10 RADAR

SODOE I-SZI 6.1 RADAR

VGSi and ILS glidepath not coincident

SEA R-161

SEA 11 RADAR

160°

16.8

R-161 116.8

RADAR 2000

6000

163°

\*5000 \*4000 \*3200 1900

GS 3.00° TCH 57

2.9 NM 2.9 NM 2.4 NM 3.9 NM 3.4 NM 0.7 0.1

IM

CATEGORY	A	B	C	D
S-ILS 16C		630/18	200 (200-½)	
S-LOC 16C	760/24	330 (400-½)		760/40 330 (400-¾)
SIDESTEP 16L	760/50	327 (400-1)	760-1½ 327 (400-1½)	760-2 327 (400-2)
CIRCLING 16C	1000-1	567 (600-1)	1000-1½ 567 (600-1½)	1000-2 567 (600-2)

SEATTLE, WASHINGTON  
Amdt 13A 10098

47° 27' N-122° 19' W

SEATTLE-TACOMA INTL (SEA)  
ILS or LOC RWY 16C

NW-1. 21 OCT 2010 to 18 NOV 2010

**SEATTLE-TACOMA INTL AIRPORT****ALERT NOTICE****ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

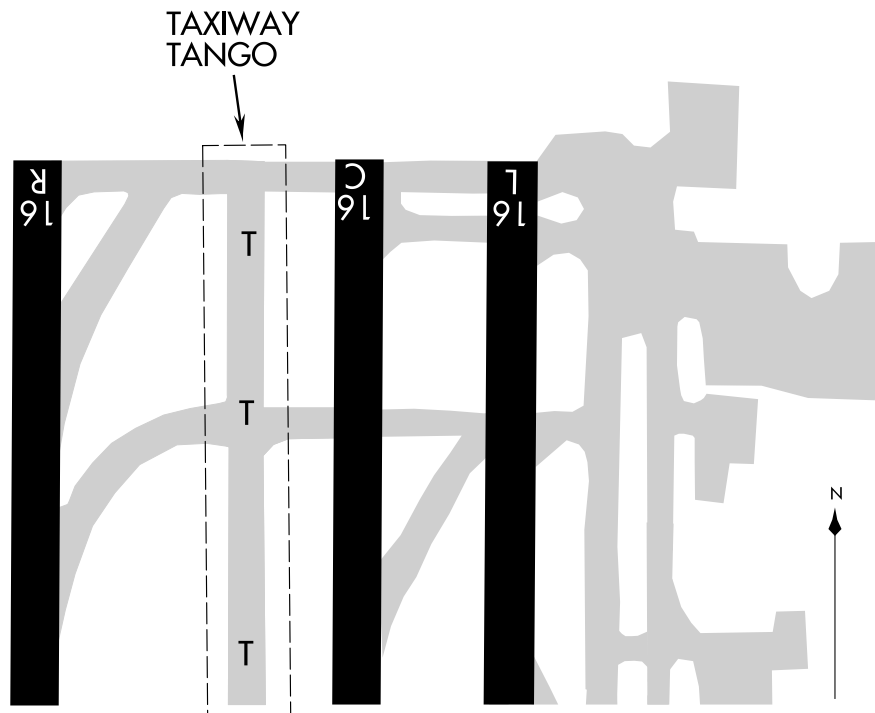
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



LOC/DME I-SNQ <b>110.3</b> Chan <b>40</b>	APP CRS <b>163°</b>	Rwy Idg TDZE Apt Elev	<b>11901</b> <b>433</b> <b>433</b>
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# ILS or LOC RWY 16L

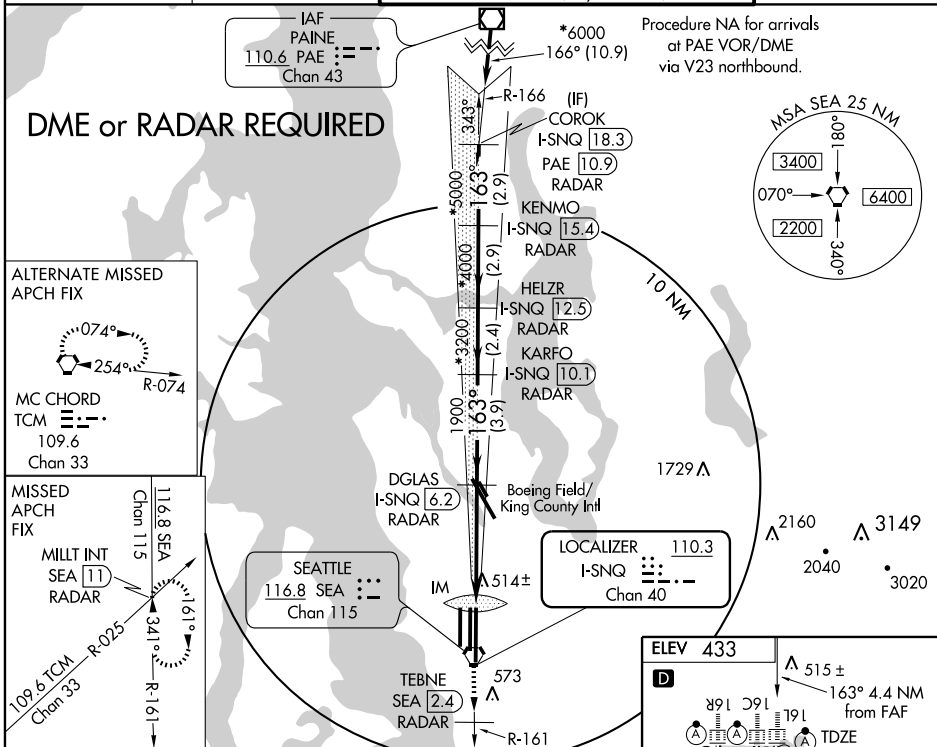
## SEATTLE-TACOMA INTL (SEA)

**V** DME or RADAR required.  
For inoperative ALSF-2, increase S-ILS 16L Cat. A visibility to RVR 5000.

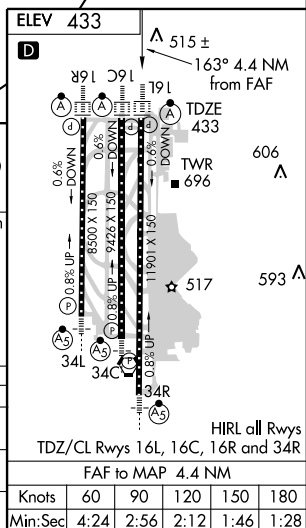


**MISSED APPROACH:** Climb heading 165° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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*When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.			
COROK I-SNQ 18.3 RADAR	KENMO I-SNQ 15.4 RADAR	HELZR I-SNQ 12.5 RADAR	KARFO I-SNQ 10.1 RADAR
*6000	*5000	*4000	*3200
GS 3.00° TCH 54	Procedure Turn NA	1900	1900
2.9 NM 2.9 NM 2.4 NM 3.9 NM 1.1 NM 0.1			
CATEGORY	A	B	C
S-ILS 16L	695/18 262 (300-1/2)	633/18 200 (200-1/2)	
S-LOC 16L	880/24	447 (500-1/2)	880/50 447 (500-1)
CIRCLING	1000-1	567 (600-1)	1000-2 567 (600-2)



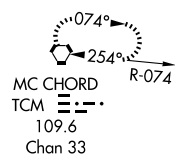
LOC/DME I-CJL <b><u>110.75</u></b> Chan <b>44</b> (Y)	APP CRS <b>163°</b>	Rwy Idg TDZE Apt Elev	<b>8500</b> <b>415</b> <b>433</b>
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ILS or LOC RWY 16R  
SEATTLE-TACOMA INTL (SEA)

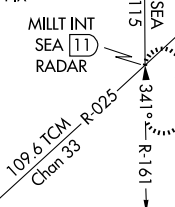
 DME or RADAR required.		ALSF-2 	MISSED APPROACH: Climb heading 158° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILIT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.
ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>

## DME or RADAR REQUIRED

ALTERNATE MISSED  
APCH FIX

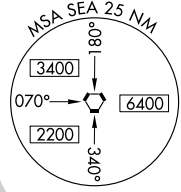


MISSED  
APCH  
FIX



LOCALIZER 110.75  
I-CJL  
Chan 44 (Y)

Procedure NA for arrivals  
at PAE VOR/DME  
via V23 northbound.



1729 A

21

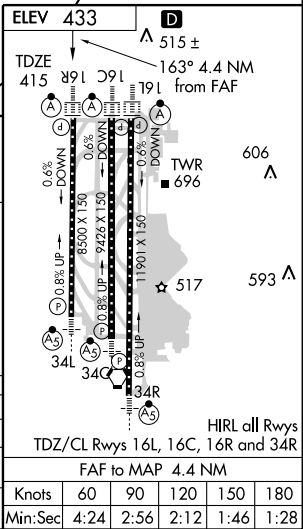
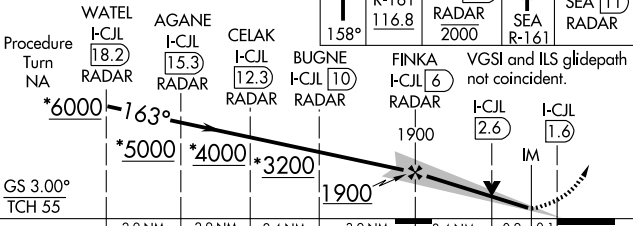
60

43

3149

150

\* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.



SEATTLE, WASHINGTON

Orig-C 11FEB10

47° 27' N-122° 19' W

SEATTLE-TACOMA INTL (SEA)

ILS or LOC RWY 16R



LOC/DME I-TUC	APP CRS	RDY 34C Idg	9426	RDY 34R Idg	11901
<b>111.7</b>	<b>343°</b>	<b>TDZE</b>	<b>387</b>	<b>TDZE</b>	<b>372</b>
Chan <b>54</b>		<b>Apt Elev</b>	<b>433</b>	<b>Apt Elev</b>	<b>433</b>

## ILS or LOC RWY 34C

SEATTLE-TACOMA INTL (SEA)

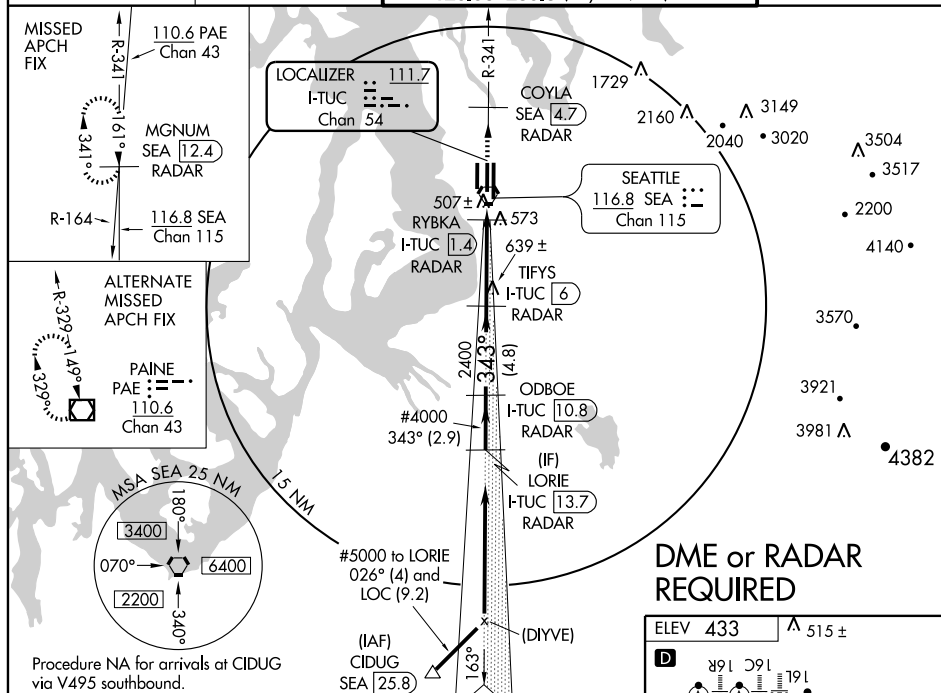


For inoperative MALSR, increase SIDESTEP 34R Cats. A and B visibility to RVR 6000.  
 \* RVR 1800 authorized with the use of FD or AP or HUD to DA.  
 DME or RADAR required.

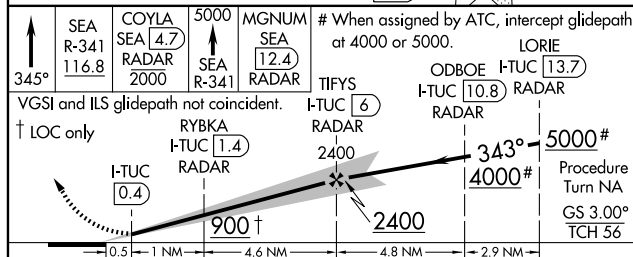


MISSED APPROACH: Climb heading 345° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
<b>118.0</b>	<b>133.65 273.45</b>	<b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	<b>121.7</b>

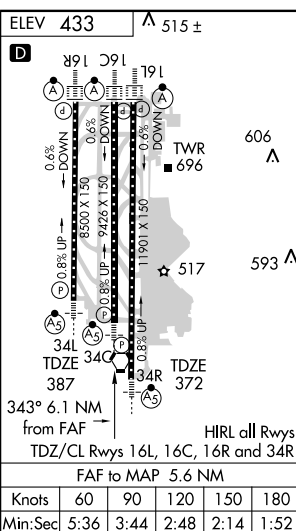


Procedure NA for arrivals at CIDUG via V495 southbound.



CATEGORY	A	B	C	D
S-ILS 34C		*587/24 200 (200-½)		
S-LOC 34C		760/24 373 (400-½)		760/40 373 (400-¾)
SIDESTEP 34R	760/50 388 (400-1)	760/60 388 (400-1 ¼)		760-1 ¾ 388 (400-1 ¾)
CIRCLING	1000-1 567 (600-1)	1000-1 ½ 567 (600-1 ½)		1000-2 567 (600-2)

## DME or RADAR REQUIRED



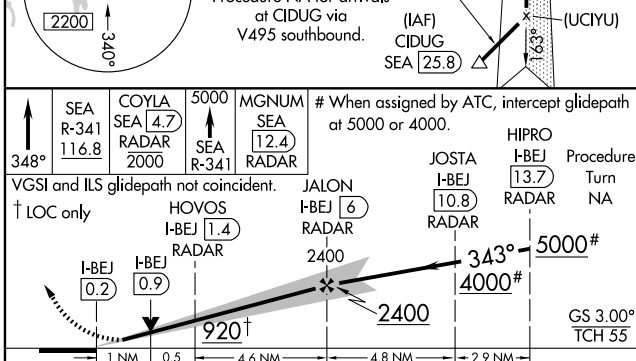
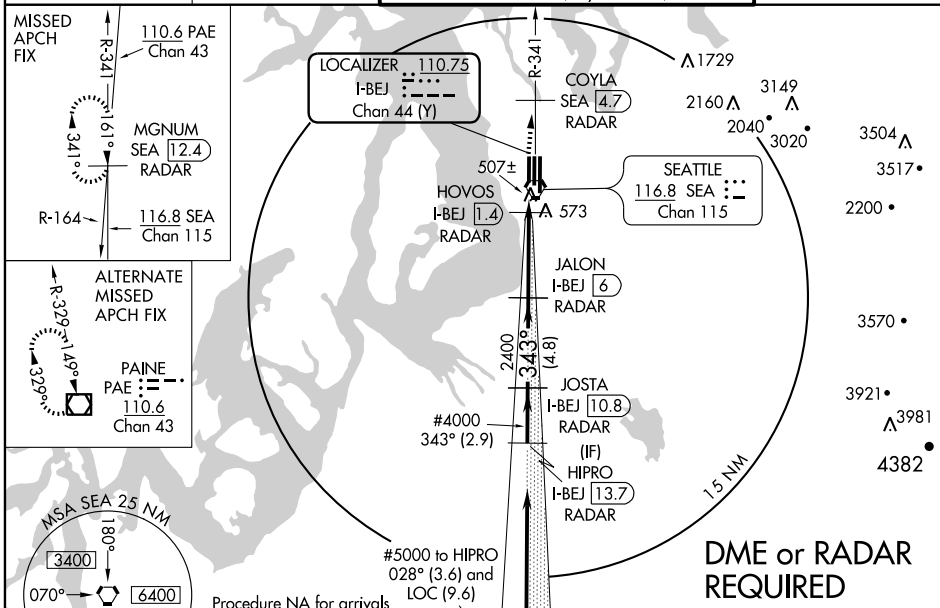
LOC/DME I-BEJ <b>110.75</b> Chan <b>44</b> (Y)	APP CRS <b>343°</b>	Rwy Idg TDZE Apt Elev	<b>8500</b> <b>379</b> <b>433</b>
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# ILS or LOC RWY 34L

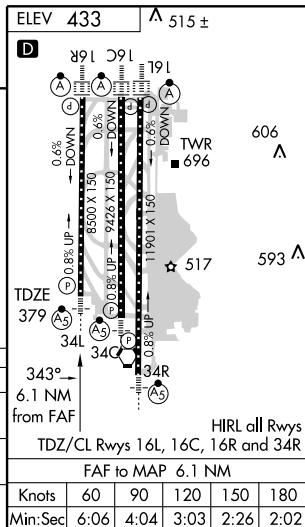
## SEATTLE-TACOMA INTL (SEA)

<p>DME or RADAR required.</p> <p>* RVR 1800 authorized with the use of FD or AP or HUD to DA.</p>	<p>MALSR</p>	<p>MISSED APPROACH: Climb heading 348° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/ RADAR and hold, continue climb-in-hold to 5000.</p>
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ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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CATEGORY	A	B	C	D
S-ILS 34L	* 579/24 200 (200-½)			
S-LOC 34L	760/24 381 (400-½)		760/40 381 (400-¾)	
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)



ILS or LOC RWY 34R  
SEATTLE-TACOMA INTL (SEA)

MALSR  
Rwy 34R/C

**MISSED APPROACH:** Climb heading 341° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/RADAR and hold, continue climb-in-hold to 5000.

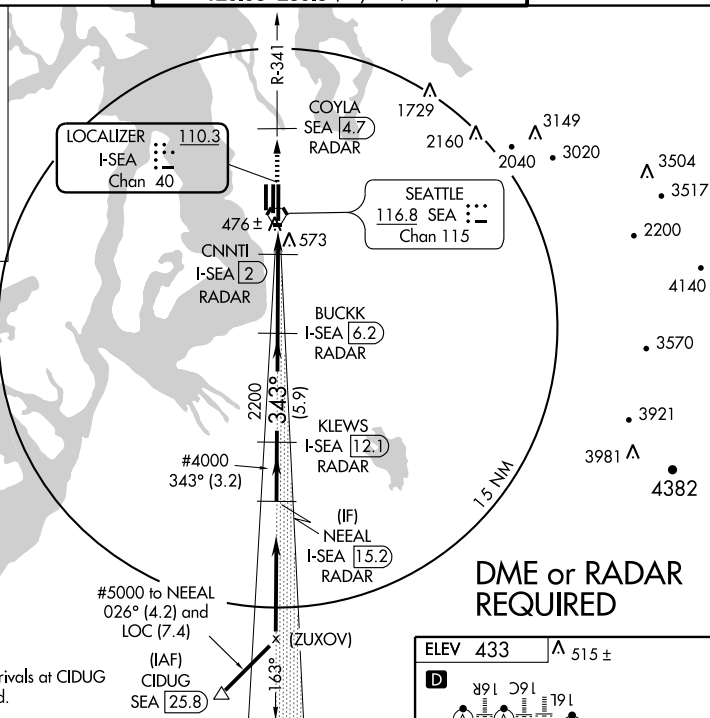
ALTERNATE  
MISSED  
APCH FIX

R 329° 149°

329°

PAINE  
PAE :: ::  
110.6  
Chan 43

Procedure NA for arrivals at CIDUG  
via V495 southbound.


DME or RADAR  
REQUIRED

	Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54	

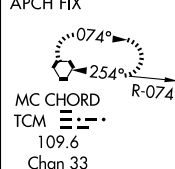
LOC/DME I-SZI <b>111.7</b> Chan <b>54</b>	APP CRS <b>163°</b>	Rwy Idg <b>9426</b> TDZE <b>430</b> Apt Elev <b>433</b>
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## ILS RWY 16C (CAT II)

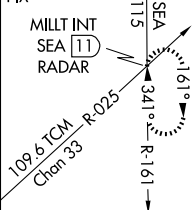
SEATTLE-TACOMA INTL (SEA)

DME or RADAR required.		ALSF-2 	MISSED APPROACH: Climb heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILIT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.
ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>

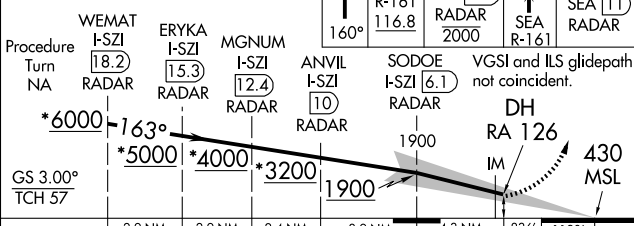
## DME or RADAR REQUIRED

ALTERNATE MISSED  
ARCHITECT

MISSED  
APCH  
FIX



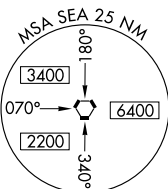
\* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.



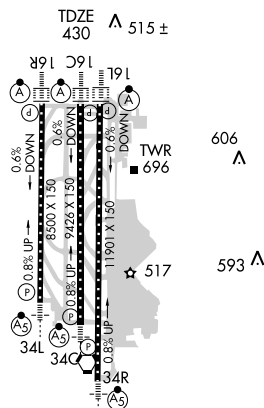
	2.9 NM	2.9 NM	2.4 NM	3.9 NM	4.3 NM	8.36	1120
CATEGORY	A	B	C	D			
S-ILS 16C	RA 126/12 100 DA 530						

CATEGORY II ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED

Procedure NA for arrivals at PAE  
VOR/DME via V23 northbound.



ELEV 433



HIRL all Rwys  
TDZ/CL Rwys 16L, 16C, 16R and 34R

SEATTLE, WASHINGTON

Amdt 13A 10098

SEATTLE-TACOMA INTL (SEA)

ILS RWY 16C (CAT II)



47°27'N-122°19'W

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

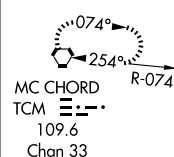
LOC/DME I-SZI <b><u>111.7</u></b> Chan <b>54</b>	APP CRS <b>163°</b>	Rwy Idg <b>9426</b> TDZE <b>430</b> Apt Elev <b>433</b>
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ILS RWY 16C (CAT III)  
SEATTLE-TACOMA INTL (SEA)

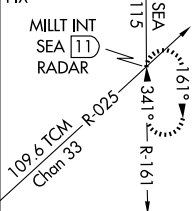
 DME or RADAR required.		ALSF-2 	MISSED APPROACH: Climb heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILIT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.
ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>

DME or RADAR REQUIRED  
CATEGORY III SPECIAL  
AUTOLAND EVALUATION  
REQUIRED

ALTERNATE MISSED  
ARCH FLY



MISSED  
APCH  
FIX

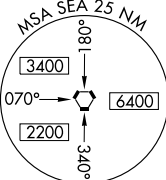


IAF  
PAINE  
110.6 PAE :==  
Chan 43

ALSF-2

**MISSED APPROACH:** Climb heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/SEA 11 DME/RADAR and hold. continue climb-in-hold to 5000.

Procedure NA for arrivals at PAE  
VOR/DME via V23 northbound.



\* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

Procedure Turn NA

WEMAT  
I-SZI  
18.2  
RADAR

ERYKA  
I-SZI  
15.3  
RADAR

MGNUM  
I-SZI  
12.4  
RADAR

ANVIL  
I-SZI  
10  
RADAR

SODOE  
I-SZI  
6.1  
RADAR

VGSI and ILS glidepath not coincident.

IM

160°

R-161

SEA R-161

SEA R-161

\*6000

\*163°

GS 3.00°

TCH 57

\*5000

\*4000

\*3200

1900

1900

534

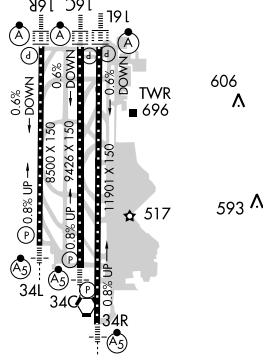
430 MSL

	→ 2.9 NM →	→ 2.9 NM →	→ 2.4 NM →	→ 3.9 NM →	→ 4.3 NM →	904'	→ 1120' →
CATEGORY	A		B		C		D
S-ILS 16C			CAT IIIa		RVR 07		
S-ILS 16C			CAT IIIb		RVR 03		
S-ILS 16C			CAT IIIc		NA		

CATEGORY III ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED

ELEV 433

TDZE  $\Delta$  515 ± 430



HIRL all Rwys  
TDZ/CL Rwys 16L, 16C, 16R and 34R

SEATTLE, WASHINGTON  
Amdt 13A 10098

SEATTLE-TACOMA INTL (SEA)


ILS RWY 16C (CAT III)

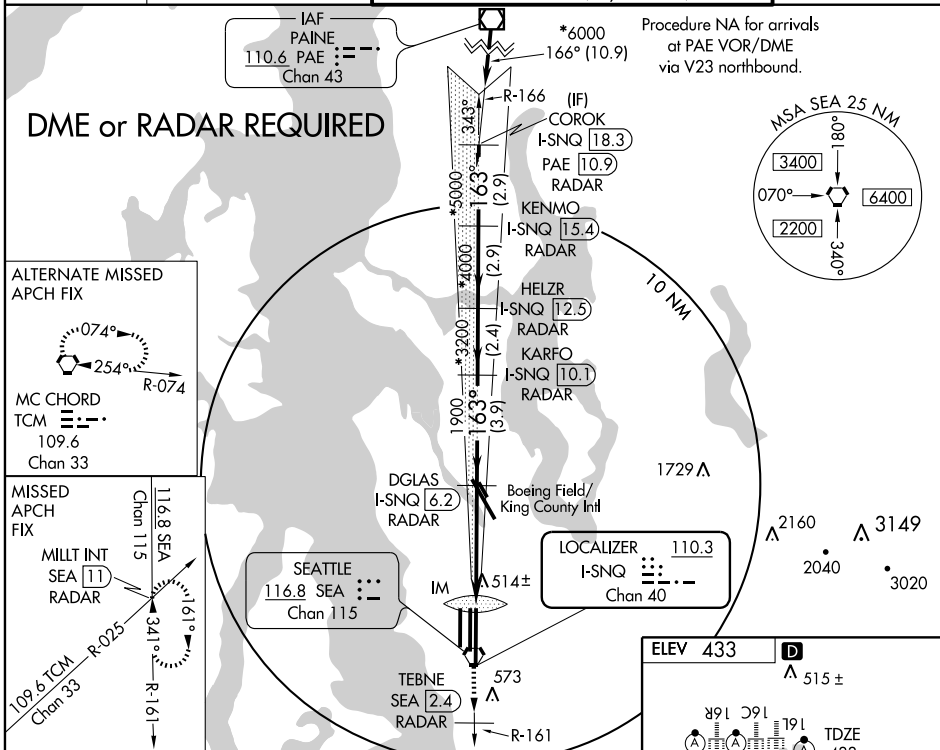
47°27'N-122°19'W

NW-1.21 OCT 2010 to 18 NOV 2010

LOC/DME I-SNQ <b>110.3</b> Chan <b>40</b>	APP CRS <b>163°</b>	Rwy Idg <b>11901</b> TDZE <b>433</b> Apt Elev <b>433</b>
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ILS RWY 16L (CAT II)  
SEATTLE-TACOMA INTL (SEA)

DME or RADAR required.		ALSF-2 	MISSED APPROACH: Climb heading 165° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILIT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.
ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>



NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

\*When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

COROK	KENMO	HELZR	KARFO
I-SNQ [18.3] RADAR	I-SNQ [15.4] RADAR	I-SNQ [12.3] RADAR	I-SNQ [10.1] RADAR

SEA R-161	TEBNE SEA [2.4] RADAR 2000	5000 SEA R-161	MILIT INT SEA [11] RADAR
↑ 165°	DGLAS I-SNQ [6.2] RADAR	VGSI and ILS glidepath not coincident.	

**\*6000** — **163°**

**\*5000**    **\*4000**    **\*3200**

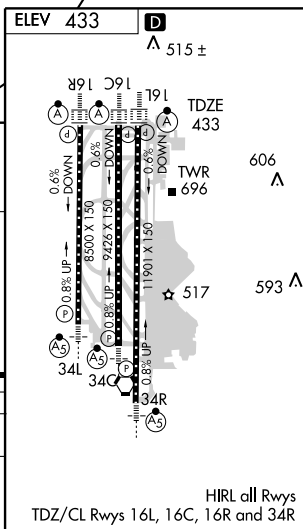
GS 3.00°    TCH 54'    Procedure Turn NA

1900    RA 125    IM    433 MSL

— 2.9 NM — 2.9 NM — 2.4 NM — 3.9 NM — 4.3 NM — 895' — 1089'

CATEGORY	A	B	C	D
S-ILS 16L	NA	RA 125/12 100 DA 533		

CATEGORY II ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED



SEATTLE, WASHINGTON  
Amdt 4A 10098

47°27'N-122°19'W

SEATTLE-TACOMA INTL (SEA)  
ILS RWY 16L (CAT II)

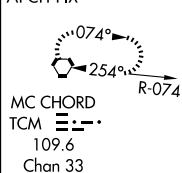
LOC/DME I-SNQ <b>110.3</b> Chgn <b>40</b>	APP CRS <b>163°</b>	Rwy Idg <b>11901</b> TDZE <b>433</b> Apt Elev <b>433</b>
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ILS RWY 16L (CAT III)  
SEATTLE-TACOMA INTL (SEA)

<div><div></div><div>DME or RADAR required.</div></div>		<div><div>ALSF-2</div><div><div><div></div><div></div></div><div><div></div><div></div></div></div></div>	<div>MISSED APPROACH: Climb heading 165° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILIT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.</div>	
<div>ATIS 118.0</div>	<div>SEATTLE APP CON 133.65 273.45</div>	<div>SEATTLE TOWER 119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)</div>		<div>GND CON 121.7</div>

DME or RADAR REQUIRED  
CATEGORY III SPECIAL  
AUTOLAND EVALUATION  
REQUIRED

ALTERNATE MISSED  
APCH FIX



MISSED  
APCH  
FIX

Chan 115

116.8 SEA

MILIT INT  
SEA 11  
RADAR

IAF  
PAINE  
110.6 PAE : = -  
Chan 43

\*6000

Procedure NA for arrivals  
at PAE VOR/DME  
via V23 northbound.

5 (IF)  
COROK  
I-SNQ 18.3  
PAE 10.9  
RADAR

Q 15.4

DAR  
ARFO  
Q 10.1  
DAR

ing Field/  
County Intl

DGLAS  
-SNQ 6.2  
RADAR

LOCALIZER 110.3  
I-SNQ  
Chan 40

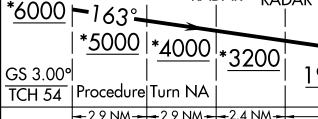
SEATTLE  
116.8 SEA : :  
Chan 115

•  $\Delta 514 \pm$

TEBNE  
SEA 2.4  
RADAR

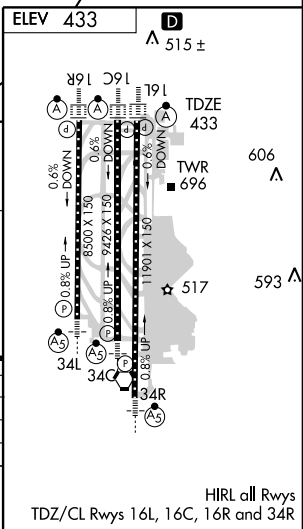
\* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

COROK	KENMO	HELZR	KARFO
I-SNQ	I-SNQ	I-SNQ	I-SNQ
18.3	15.4	12.5	10.1
RADAR	RADAR	RADAR	RADAR



CATEGORY	A	B	C	D
S-ILS 16L	NA	CAT III <sub>a</sub>	RVR 07	
S-ILS 16L	NA	CAT III <sub>b</sub>	RVR 03	
S-ILS 16L		CAT III <sub>c</sub>	NA	

CATEGORY III ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED



SEATTLE, WASHINGTON  
Amdt 4A 10098

SEATTLE-TACOMA INTL (SEA)  
ILS RWY 16L (CAT III)

47°27'N-122°19'W

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010





ILS RWY 16R (CAT III)  
SEATTLE-TACOMA INTL (SEA)


DME or RADAR  
REQUIRED

CATEGORY III SPECIAL  
AUTOLAND  
EVALUATION REQUIRED

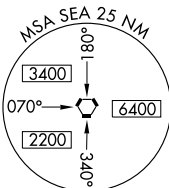
MC CHORD  
TCM  $\equiv \cdot - \cdot$   
109.6  
Chan 33

MISSED  
APCH  
FIX

MILIT INT  
SEA 11  
RADAR

LOCALIZER 110.75  
I-CJL   
Chgn 44 (Y)

Procedure NA for arrivals  
at PAE VOR/DME  
via V23 northbound.



1729 A

$\Lambda^{2160}$        $\Lambda^{3149}$   
 •      •  
 2040      3020

ELEV 433

TDZE  $\Lambda_{515 \pm}$

\* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

Procedure	WATL I-CJL 18.2	AGANE I-CJL 15.3	CELAK I-CJL 12.3	158° K-161 116.8	RADAR 2000	SEA R-161	SEA RADAR
Turn				BUGNE I-CJL 10	FINKA I-CJL 6	VGSI and ILS glidepath not coincident.	
NA	RADAR	RADAR					

CATEGORY	A	B	C	D
S-ILS 16R		CAT IIIa	RVR 07	
S-ILS 16R		CAT IIIb	RVR 03	
S-ILS 16R		CAT IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED


HIRL all Rwys  
TDZ/CL Rwys 16L, 16C, 16R and 34R

SEATTLE-TACOMA INTL (SEA)  
RWY 16R (CAT III)

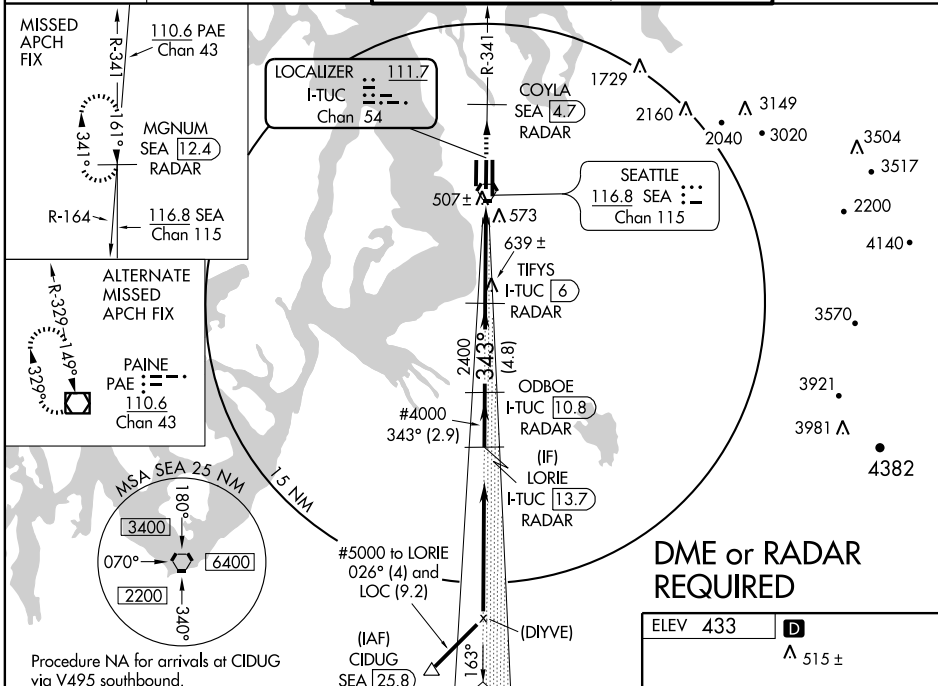
47°27'N-122°19'W



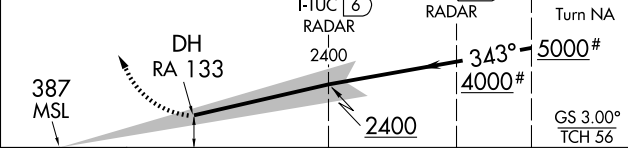
LOC/DME I-TUC <b><u>111.7</u></b> Chan <b>54</b>	APP CRS <b>343°</b>	Rwy Idg TDZE Apt Elev	<b>9426</b> <b>387</b> <b>433</b>
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ILS RWY 34C (CAT II)  
SEATTLE-TACOMA INTL (SEA)

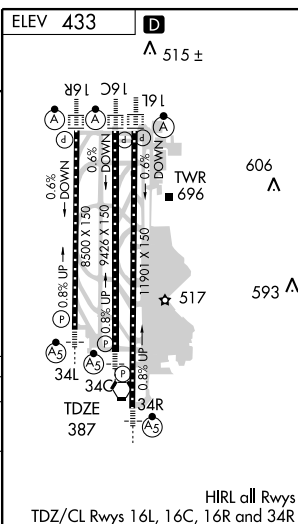
<p><b>⚠</b> Procedure does not meet ICAO standard for ALSF/TDZ/CL lighting systems.</p> <p>Authorization to conduct this approach requires specific OPSPREC approval or LOA for this Rwy. DME or RADAR required.</p>	<p>MALSR</p> 	<p>MISSED APPROACH: Climb heading 345° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/RADAR and hold, continue climb-in-hold to 5000.</p>
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ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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 <b>345°</b>	<b>SEA</b> <b>R-341</b> <b>116.8</b>	<b>COYLA</b> <b>SEA</b> <b>4.7</b> <b>RADAR</b> <b>2000</b>	<b>5000</b>  <b>SEA</b> <b>R-341</b>	<b>MGNUM</b> <b>SEA</b> <b>12.4</b> <b>RADAR</b>	# When assigned by ATC, intercept glidepath at 4000 or 5000.			
VGSI and ILS glidepath not coincident.					<b>TIFY5</b> <b>I-TUC</b> <b>6</b> <b>RADAR</b> <b>2400</b>	<b>ODBOE</b> <b>I-TUC</b> <b>10.8</b> <b>RADAR</b>	<b>LORIE</b> <b>I-TUC</b> <b>13.7</b> <b>RADAR</b>	Procedure Turn NA
								
CATEGORY	A		B		C		D	
S-ILS 34C	RA 133/12 100 DA 487							

CATEGORY II ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED



SEATTLE, WASHINGTON  
Amdt 2B 10098

SEATTLE-TACOMA INTL (SEA)

ILS RWY 34C (CAT II)


47°27'N-122°19'W

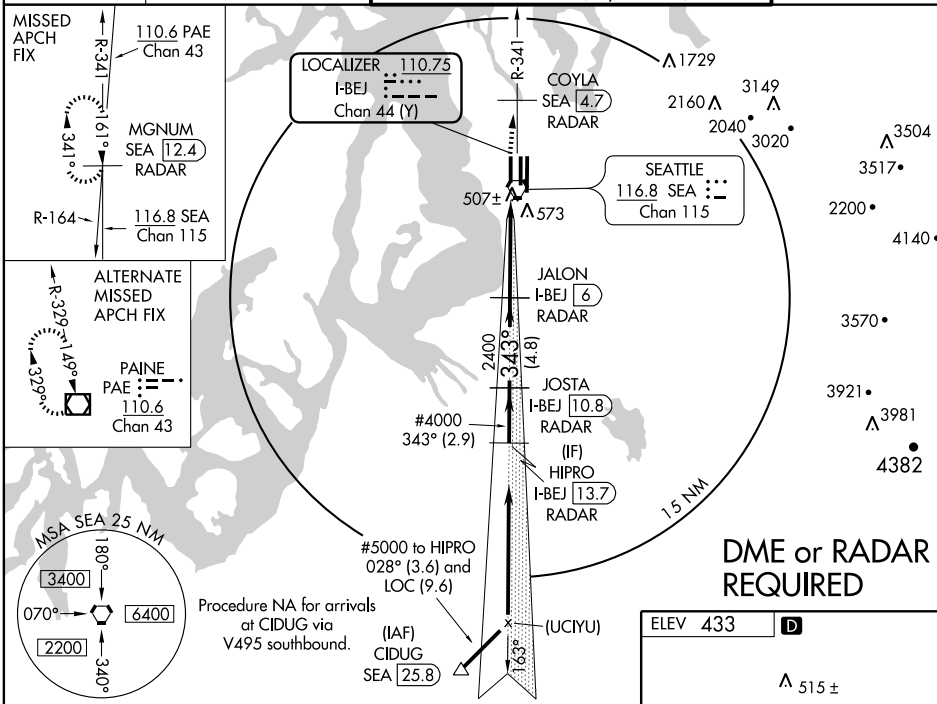
NW-1, 21 OCT 2010 to 18 NOV 2010



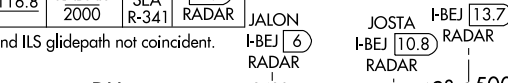
NW-1. 21 OCT 2010 to 18 NOV 2010

LOC/DME I-BEJ <b><u>110.75</u></b> Chan <b>44</b> (Y)	APP CRS <b>343°</b>	Rwy Idg TDZE Apt Elev	<b>8500</b> <b>379</b> <b>433</b>
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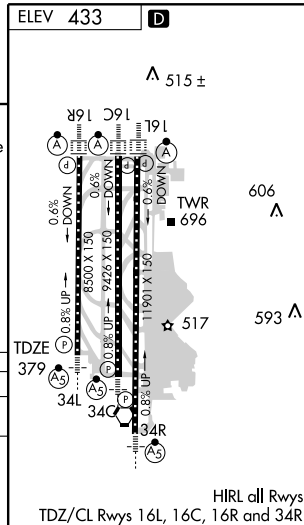
**ILS RWY 34L (CAT II)**  
SEATTLE-TACOMA INTL (SEA)

<b>T</b> DME or RADAR required. Procedure does not meet ICAO standard for ALSF/TDZ/CL lighting systems. Authorization to conduct this approach requires specific OPSSEC approval or LOA for this Rwy.		<b>MALSR</b> 	<b>MISSED APPROACH:</b> Climb heading 348° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGUNM/SEA 12.4 DME/ RADAR and hold, continue climb-in-hold to 5000.
<b>ATIS</b> <b>118.0</b>	<b>SEATTLE APP CON</b> <b>133.65 273.45</b>	<b>SEATTLE TOWER</b> <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	<b>GND CON</b> <b>121.7</b>



 <b>348°</b> <b>SEA</b> <b>R-341</b> <b>116.8</b>	<b>COYLA</b> <b>SEA 4.7</b> <b>RADAR</b> <b>2000</b>	<b>5000</b>  <b>SEA</b> <b>R-341</b> <b>12.4</b> <b>RADAR</b>	<b># When assigned by ATC, intercept glidepath at 5000 or 4000.</b>		<b>Procedure Turn NA</b>
<b>VGSI and ILS glidepath not coincident.</b>					
					
<b>CATEGORY</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	
<b>S-ILS 34L</b>	<b>RA 150/12 100 DA 479</b>				

CATEGORY II ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED



LOC/DME I-SEA <b>110.3</b> Chan <b>40</b>	APP CRS <b>343°</b>	Rwy Idg TDZE Apt Elev	<b>11901</b> <b>372</b> <b>433</b>
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## ILS RWY 34R (CAT II)

SEATTLE-TACOMA INTL (SEA)



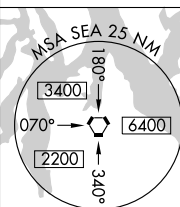
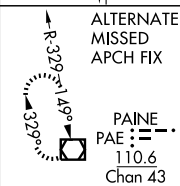
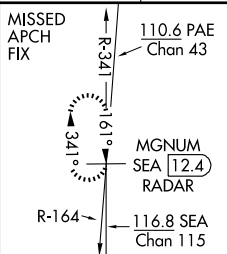
Procedure does not meet ICAO standard for ALSF/TDZ/CL lighting systems. Authorization to conduct this approach requires specific OPSPEC approval or LOA for this Rwy. DME or RADAR required.

MALSR



MISSED APPROACH: Climb heading 341° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/RADAR and hold, continue climb-in-hold to 5000.

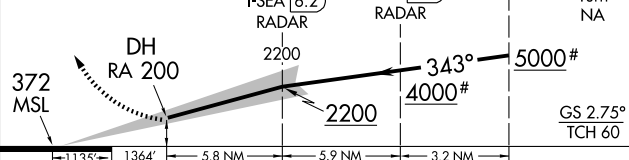
ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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Procedure NA for arrivals at CIDUG via V495 southbound.

SEA R-341 116.8	COYLA SEA 4.7 RADAR 2000	5000 SEA R-341	MGNUM SEA 12.4 RADAR	Use I-SEA DME when on the localizer course. # When assigned by ATC, intercept glidepath at 4000 or 5000.
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VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 34R	RA 200/12	100	DA 472	

**CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED.**

SEATTLE, WASHINGTON  
Amdt 1B 10098

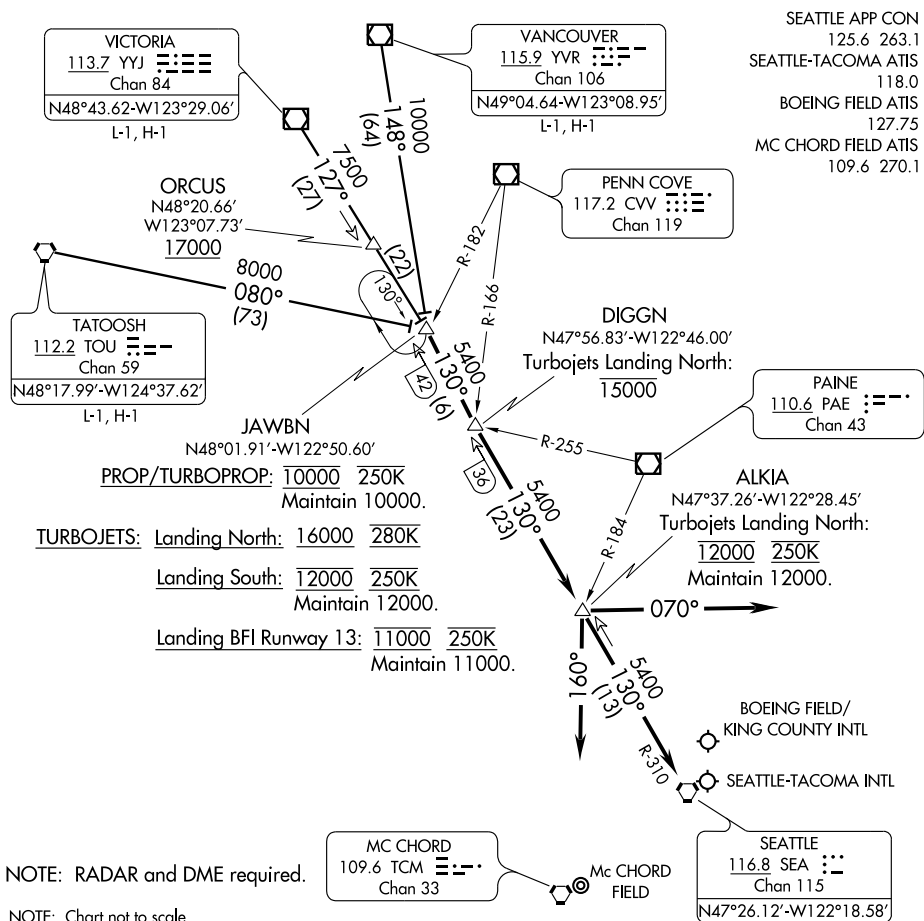
47°27'N-122°19'W

SEATTLE-TACOMA INTL (SEA)

**ILS RWY 34R (CAT II)**

HIRL all Rwys  
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 21 OCT 2010 to 18 NOV 2010



**TATOOSH TRANSITION (TOU.JAWBN1):** From over TOU VORTAC via TOU R-080 to JAWBN INT. Thence...

**VANCOUVER TRANSITION (YVR.JAWBN1):** From over YVR VORTAC via YVR R-148 to JAWBN INT. Thence...

**VICTORIA TRANSITION (YYJ.JAWBN1):** From over YYJ VOR/DME via YYJ R-127 to JAWBN INT. Thence...

....From over JAWBN INT/SEA 42 DME via SEA R-310 to DIGGN/SEA 36 DME then via SEA R-310 to ALKIA INT/SEA 13 DME, thence....

**LANDING NORTH:** Depart ALKIA INT heading 160° for vectors to final approach course.

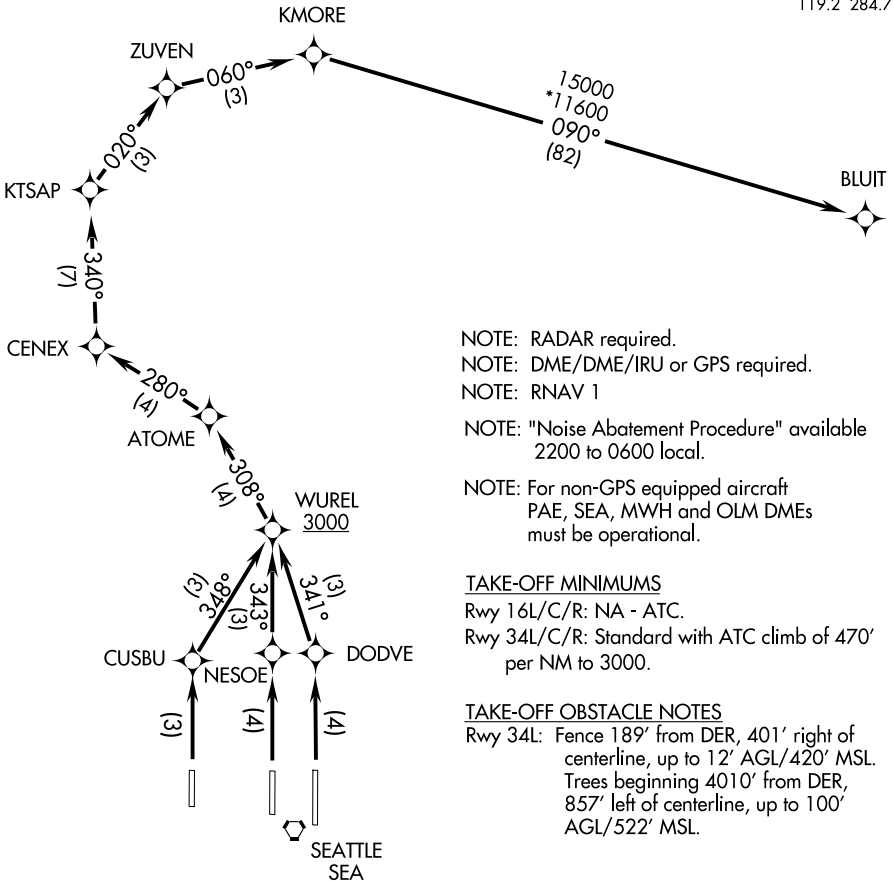
**LANDING SOUTH:** Depart ALKIA INT heading 070° for vectors to final approach course.

**LANDING McCHORD FIELD:** After ALKIA INT proceed direct SEA VORTAC.

**LOST COMMUNICATIONS:** After ALKIA INT proceed direct SEA VORTAC.

## KMORE TWO DEPARTURE (RNAV)

ATIS  
118.0  
SEATTLE DEP CON  
119.2 284.7



NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34L: Climb direct CUSBU, then via 348° track to cross WUREL

**TAKE-OFF RUNWAY 34C:** Climb direct NESOE, then via 343° track to cross WUREL at or above 3000, then via depicted route to BLUIT, thence. . .

**TAKE-OFF RUNWAY 34R:** Climb direct DODVE, then via 341° track to cross WUREL at or above 3000, then via depicted route to BLUIT, thence. . .

...via assigned route. Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

## KMORE TWO DEPARTURE (RNAV)

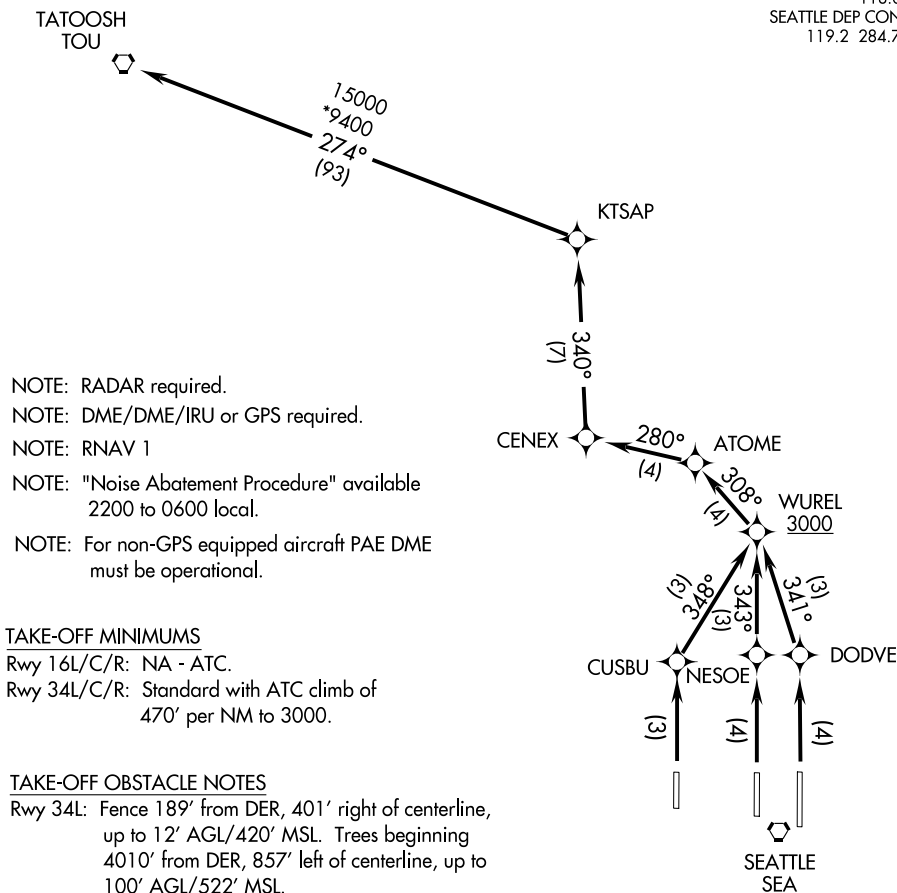
(KMORE2.KMORE) 09015

SEATTLE, WASHINGTON  
SEATTLE-TACOMA INTL (SEA)

NW-1, 21 OCT 2010 to 18 NOV 2010

## KTSAP THREE DEPARTURE (RNAV)

ATIS  
118.0  
SEATTLE DEP CON  
119.2 284.7



NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RUNWAY 34L:** Climb direct CUSBU, then via 348° track to cross WUREL at or above 3000, then via depicted route to TOU VORTAC, thence. . . .

**TAKE-OFF RUNWAY 34C:** Climb direct NESOE, then via 343° track to cross WUREL at or above 3000, then via depicted route to TOU VORTAC, thence. . . .

**TAKE-OFF RUNWAY 34R:** Climb direct DODVE, then via 341° track to cross WUREL at or above 3000, then via depicted route to TOU VORTAC, thence. . . .

. . . .via assigned route. Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.





# MOUNTAIN SIX DEPARTURE

SL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)  
SEATTLE, WASHINGTON

ATIS  
118.0  
SEATTLE DEP CON  
119.2 284.7

VANCOUVER  
115.9 YVR   
Chan 106  
N49°04.64'  
W123°08.95'

L-1, H-1

WHATCOM  
113.0 HUH   
Chan 77  
N48°56.72'  
W122°34.76'

L-1, H-1

PAINÉ  
110.6 PAE   
Chan 43  
N47°55.19'  
W122°16.67'

L-1, H-1

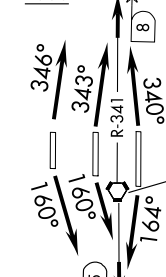
PRINCETON  
113.9 YDC   
Chan 86  
N49°22.89'  
W120°22.42'

H-1

CRANBROOK  
112.1 YXC   
Chan 58  
N49°33.30'  
W116°05.27'

H-1

NEZUG  
N47°34.13'  
W122°18.58'  
4000



SEATTLE  
116.8 SEA   
Chan 115  
N47°26.12'  
W122°18.58'

L-1, H-1

NICHY  
N47°21.13'  
W122°18.58'  
3000

ELLENSBURG  
117.9 ELN   
Chan 126  
N47°01.46'  
W120°27.51'

L-13, H-1

EPHRATA  
112.6 EPH   
Chan 73  
N47°22.68'  
W119°25.44'

L-13, H-1

SPOKANE  
115.5 GEG   
Chan 102  
N47°33.90'  
W117°37.61'

L-13, H-1

MULLAN PASS  
117.8 MLP   
Chan 125  
N47°27.41'  
W115°38.76'

L-13, H-1

MOSES LAKE  
115.0 MWH   
Chan 97  
N47°12.65'  
W119°19.01'

L-13, H-1

YAKIMA  
116.0 YKM   
Chan 107  
N46°34.22'  
W120°26.68'

L-13, H-1

PASCO  
108.4 PSC   
Chan 21  
N46°15.78'  
W119°06.94'

L-13

NOTE: RADAR and DME required.

## TAKE-OFF MINIMUMS

Rwys 16L/C/R, 34 L/C/R: Standard.

Rwy 16L: ATC climb of 560' per NM to 3000.

Rwy 16C: ATC climb of 515' per NM to 3000.

Rwy 16R: ATC climb of 500' per NM to 3000.

Rwys 34L/C/R: ATC climb of 580' per NM to 4000.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

# MOUNTAIN SIX DEPARTURE

(MONTN6.MONTN) 10210

SEATTLE, WASHINGTON  
SEATTLE-TACOMA INTL (SEA)

NW-1, 21 OCT 2010 to 18 NOV 2010



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb heading 164° and SEA R-161 to cross NICHY at or above 3000, then left turn heading 070° for radar vectors to assigned route, thence. . . .

TAKE-OFF RUNWAYS 16C/R: Climb heading 160° and SEA R-161 to cross NICHY at or above 3000, then left turn heading 070° for radar vectors to assigned route, thence. . . .

TAKE-OFF RUNWAY 34L: Climb heading 346° and SEA R-341 to cross NEZUG at or above 4000, then right turn heading 070° for radar vectors to assigned route, thence. . . .

TAKE-OFF RUNWAY 34C: Climb heading 343° and SEA R-341 to cross NEZUG at or above 4000, then right turn heading 070° for radar vectors to assigned route, thence. . . .

TAKE-OFF RUNWAY 34R: Climb heading 340° and SEA R-341 to cross NEZUG at or above 4000, then right turn heading 070° for radar vectors to assigned route, thence. . . .

. . . . Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA.

LOST COMMUNICATIONS: If no contact with ATC leaving 4000', proceed direct SEA VORTAC, then proceed on course.

## TAKE-OFF OBSTACLE NOTES

Rwy 16L: Trees beginning 2908' from DER, 1064' right of centerline, up to 100' AGL/476' MSL.

Rwy 16C: Trees beginning 4477' from DER, 484' right of centerline, up to 100' AGL/507' MSL.

Rwy 16R: Trees, antenna on building and light pole beginning 488' from DER, 436' left of centerline, up to 100' AGL/507' MSL. Trees beginning 1137' from DER, 587' right of centerline, up to 100' AGL/468' MSL.

Rwy 34L: Fence 189' from DER, 401' right of centerline, up to 12' AGL/468' MSL.

Trees beginning 4010' from DER, 857' left of centerline, up to 100' AGL/522' MSL.

## OLYMPIA SIX ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON

SEATTLE APP CON

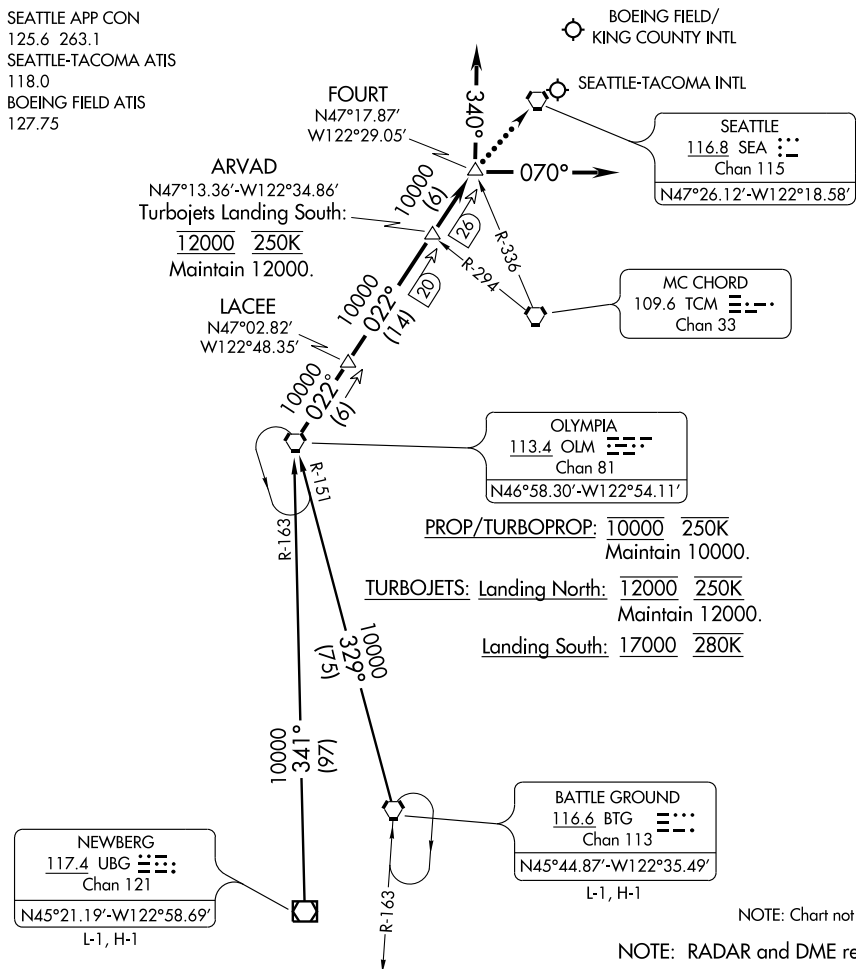
125.6 263.1

SEATTLE-TACOMA ATIS

118.0

BOEING FIELD ATIS

127.75



**BATTLE GROUND TRANSITION (BTG.OLM6):** From over BTG VORTAC via BTG R-329 and OLM R-151 to OLM VORTAC. Thence....

**NEWBERG TRANSITION (UBG.OLM6):** From over UBG VOR/DME via UBG R-341 and OLM R-163 to OLM VORTAC. Thence....

....From over OLM VORTAC via OLM R-022 to LACEE/OLM 6 DME, then via OLM R-022 to ARVAD INT/OLM 20 DME, then via OLM R-022 to FOURT INT/OLM 26 DME, thence...

**LANDING NORTH:** Depart FOURT INT/OLM 26 DME heading 070° for vectors to final approach course.

**LANDING SOUTH:** Depart FOURT INT/OLM 26 DME heading 340° for vectors to final approach course.

**LOST COMMUNICATIONS:** From over FOURT INT/OLM 26 DME, proceed direct SEA VORTAC.

## OLYMPIA SIX ARRIVAL

(OLM.OLM6) 08045

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH <b>61010</b> <b>W16B</b>	APP CRS <b>163°</b>	Rwy Idg <b>9426</b> TDZE <b>430</b> Apt Elev <b>433</b>
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## RNAV (GPS) RWY 16C

SEATTLE-TACOMA INTL (SEA)



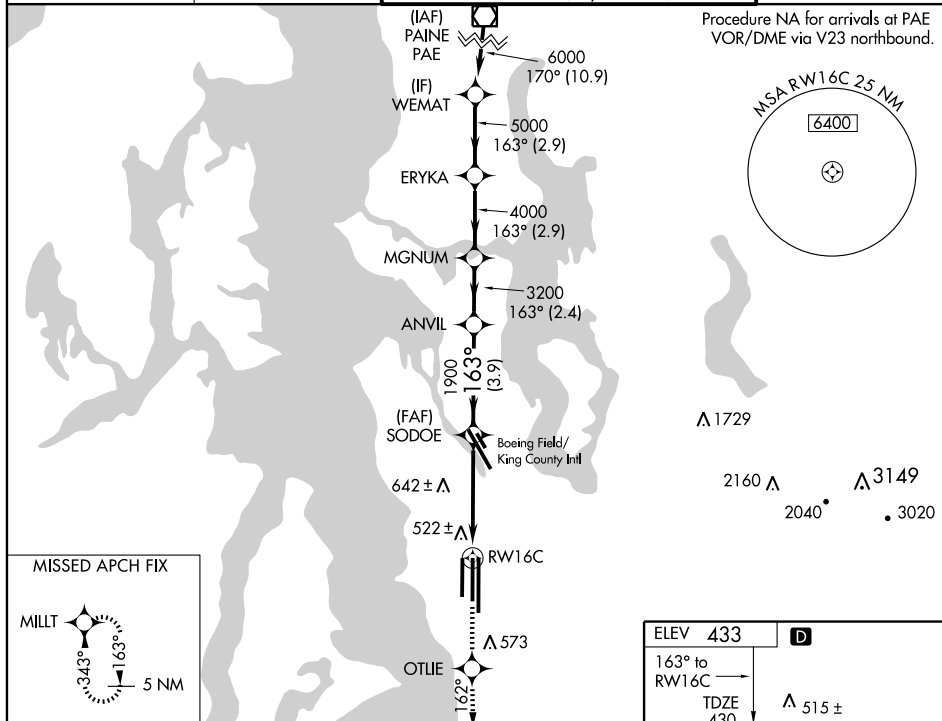
For uncompensated Baro-VNAV systems, LNAV/VNAV  
NA below -15°C (5°F) or above 47°C (116°F).  
DME/DME RNP-0.3 NA.  
See additional requirements on adjacent information page.

ALSF-2

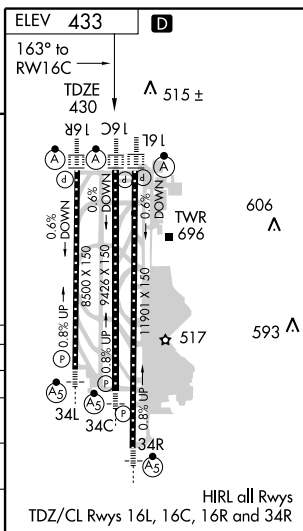


MISSED APPROACH: Climb direct OTJIE to cross OTJIE  
at or below 2000, then climb to 5000 via track 162° to  
MILLT and hold, continue climb-in-hold to 5000.

ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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	OTJIE	5000	MILLT	VGSI and RNAV glidepath not coincident.	ERYKA	WEMAT
	2000	162°			6000	
	*LNAV only					
	*1.3 NM to RW16C					
	1.3	3.1 NM	3.9 NM	2.4 NM	2.9 NM	2.9 NM
CATEGORY	A	B	C	D		
LPV DA		630/24	200 (200-½)			
LNAV/VNAV DA		811/40	381 (400-¾)			
LNAV MDA	920/24	490 (500-½)	920/40 490 (500-¾)	920/50 490 (500-1)		
CIRCLING	1000-1	567 (600-1)	1000-1½ 567 (600-1½)	1000-2 567 (600-2)		



**SEATTLE-TACOMA INTL AIRPORT****ALERT NOTICE****ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

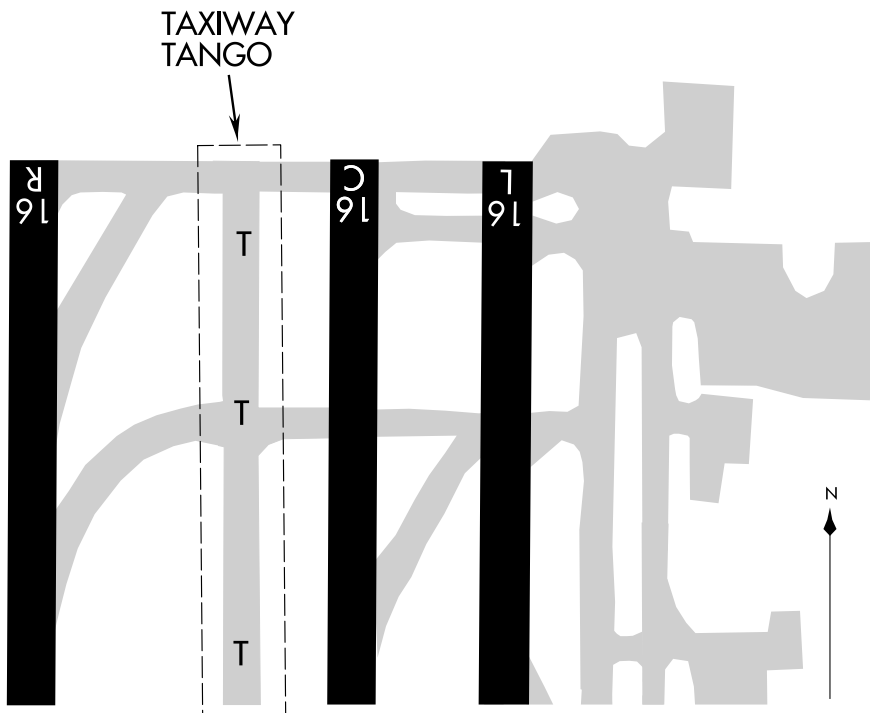
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



WAAS CH <b>63202</b> <b>W16A</b>	APP CRS <b>163°</b>	Rwy Idg <b>11901</b> TDZE <b>433</b> Apt Elev <b>433</b>
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## RNAV (GPS) RWY 16L

SEATTLE-TACOMA INTL (SEA)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 47°C (116°F).  
DME/DME RNP -0.3 NA. For inoperative ALSF-2, increase LPV all Cats. visibility to RVR 5000.

ALSF-2

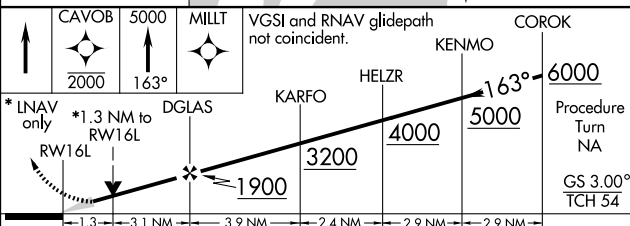
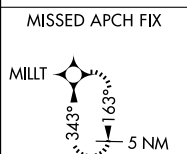
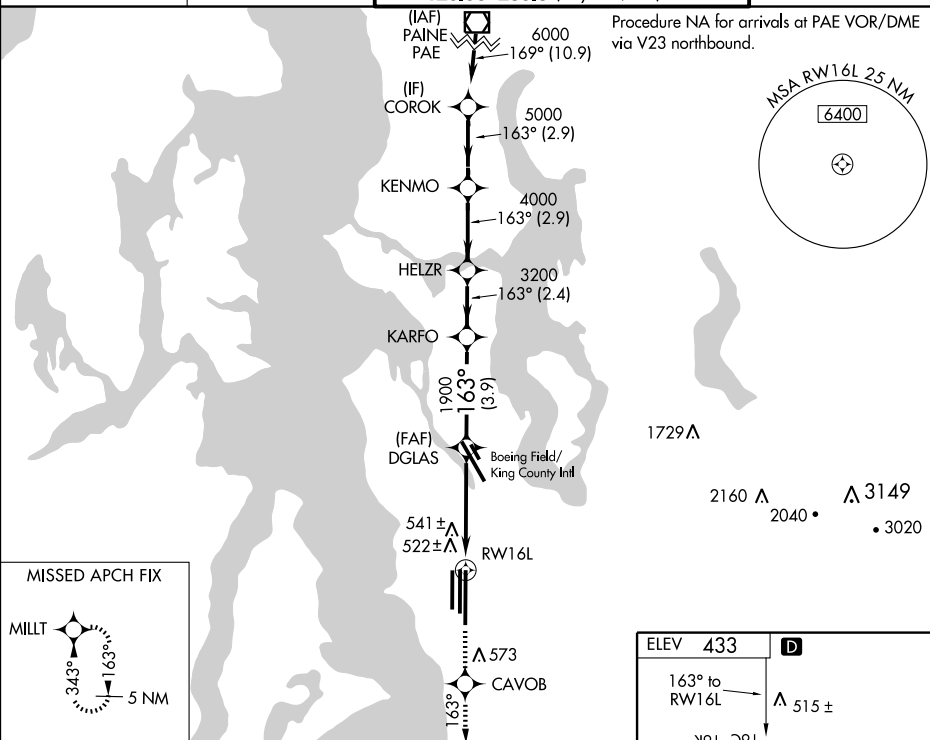


MISSED APPROACH: Climb direct CAVOB to cross CAVOB at or below 2000, then climb to 5000 via track 163° to MILT and hold, continue climb-in-hold to 5000.

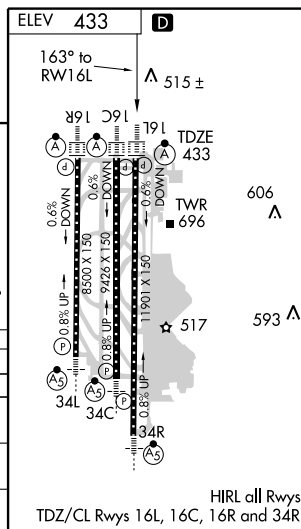
 ATIS  
**118.0**

 SEATTLE APP CON  
**133.65 273.45**

 SEATTLE TOWER  
**119.9 239.3** (Rwys 16C/34C, 16L/34R)  
**120.95 239.3** (Rwy 16R/34L)

 GND CON  
**121.7**


CATEGORY	A	B	C	D
LPV DA	729/24	296 (300-1/2)		
LNAV/VNAV DA	811/40	378 (400-3/4)		
LNAV MDA	920/24 487 (500-1/2)	920/40 487 (500-3/4)	920/50 487 (500-1)	
CIRCLING	1000-1 567 (600-1)	1000-1 1/2 567 (600-1 1/2)	1000-2 567 (600-2)	



WAAS CH <b>86910</b> <b>W16D</b>	APP CRS <b>163°</b>	Rwy Idg TDZE <b>415</b> Apt Elev <b>433</b>
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# RNAV (GPS) RWY 16R

SEATTLE-TACOMA INTL (SEA)



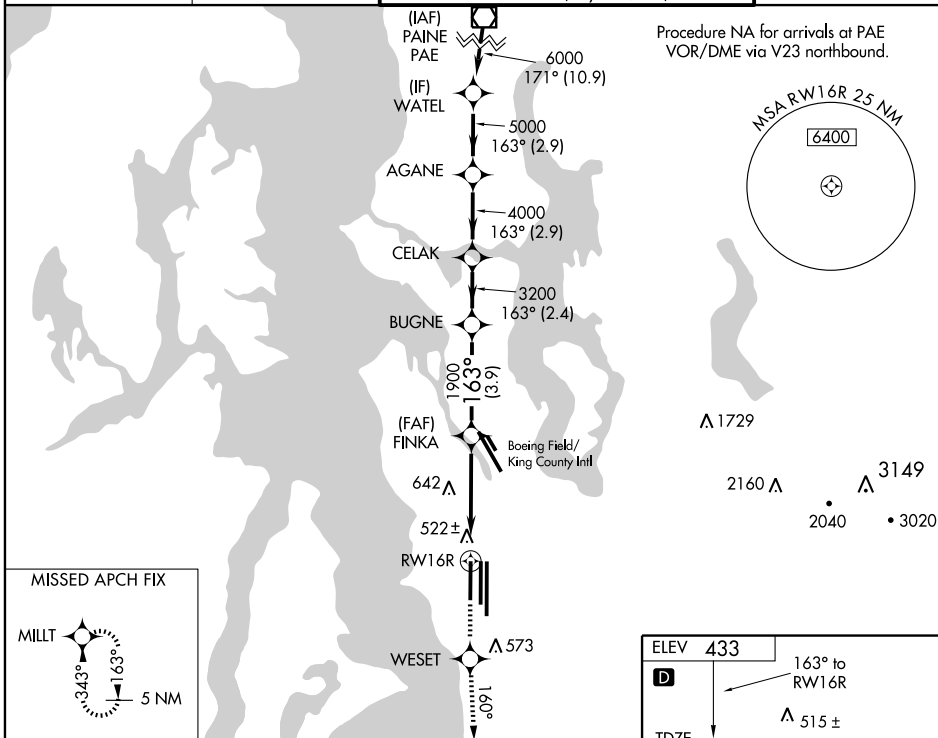
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 47°C (116°F).  
DME/DME RNP-0.3 NA.

ALSF-2

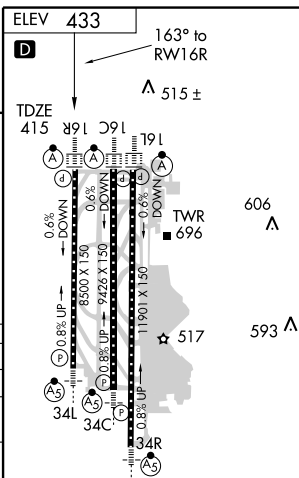


MISSED APPROACH: Climb direct WESET to cross WESET at or below 2000, then climb to 5000 via track 160° to MILLT and hold, continue climb-in-hold to 5000.

ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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WESET 2000 160°		MILLT 5000 160°		VGSI and RNAV glidepath not coincident.		AGANE 6000		WATEL 6000	
*LNAV only RW16R 1.4 NM to RW16R		FINKA 1900		BUGNE 3200		CELAK 4000		Procedure Turn NA GS 3.00° TCH 55	
1.4		3 NM		3.9 NM		2.4 NM		2.9 NM	
CATEGORY		A		B		C		D	
LPV DA		615/24		200 (200-½)					
LNAV/VNAV DA		808/40		393 (400-¾)					
LNAV MDA		920/24		505 (500-½)		920/50		505 (500-1)	
CIRCLING		1000-1		567 (600-1)		1000-1½ 567 (600-1½)		1000-2 567 (600-2)	



WAAS CH <b>77710</b> <b>W34B</b>	APP CRS <b>343°</b>	Rwy Ldg TDZE <b>387</b> Apt Elev <b>433</b>
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# RNAV (GPS) RWY 34C

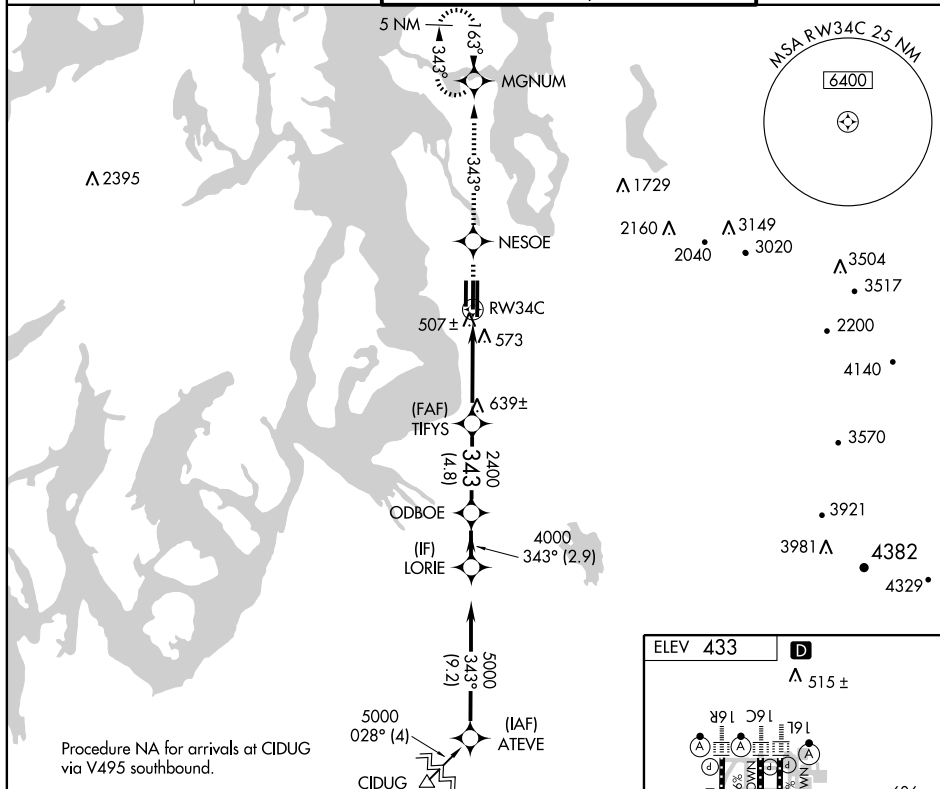
## SEATTLE-TACOMA INTL (SEA)

▼ For inoperative MALSR, increase LPV all Cats. visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA.

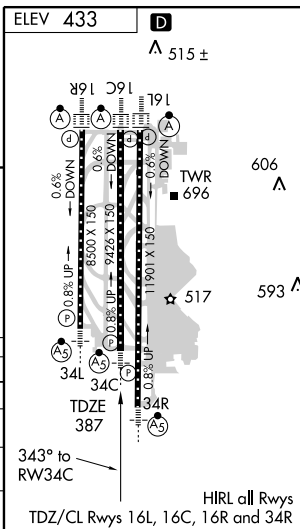


MISSED APPROACH: Climb direct NESOE to cross NESOE at or below 2000, then climb to 5000 via track 343° to MGNUM and hold, continue climb-in-hold to 5000.

ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER (Rwys 16C/34C, 16L/34R) <b>119.9 239.3</b> <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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	NESOE	5000	MGNUM	VGSI and RNAV glidepath not coincident.	LORE	Procedure Turn NA
*LNAV only	*1.5 NM to RW34C					
	1.5 NM	4.6 NM	4.8 NM	2.9 NM		
CATEGORY	A	B	C	D		
LPV DA	741/40		354 (400-¾)			
LNAV/VNAV DA	790/50		403 (400-1)			
LNAV MDA	900/24		513 (500-½)		900/50 513 (500-1)	
CIRCLING	1000-1		567 (600-1)		1000-2 567 (600-2)	





## RNAV (GPS) RWY 34L

SEATTLE-TACOMA INTL (SEA)

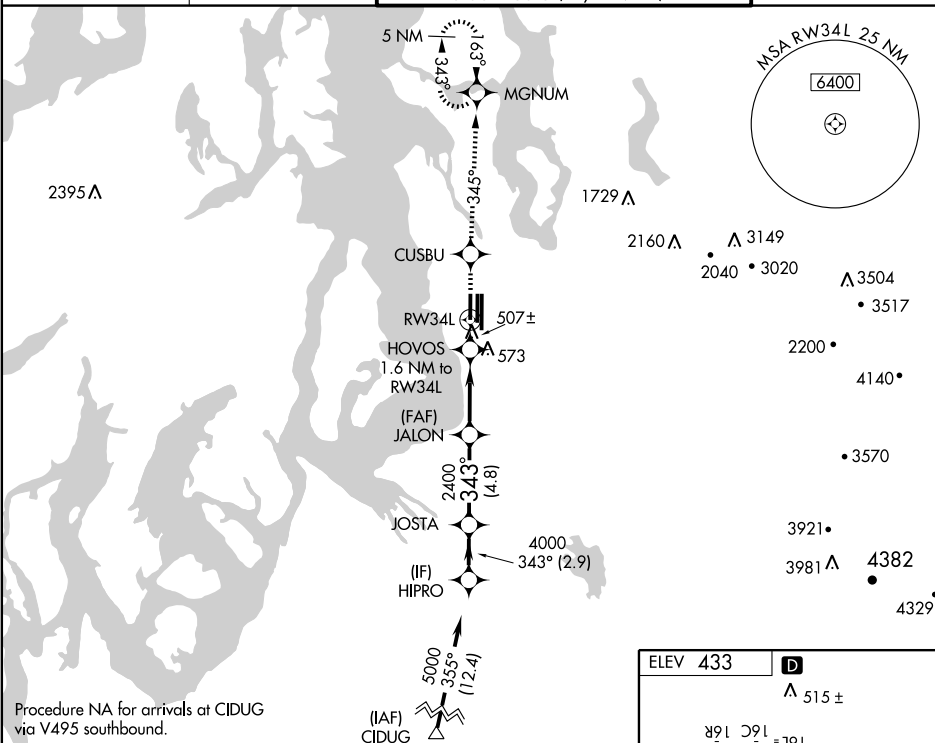
WAAS CH <b>45810</b> <b>W34D</b>	APP CRS <b>343°</b>	Rwy Idg TDZE <b>8500</b> Apt Elev <b>379</b> <b>433</b>
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▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).  
DME/DME RNP -0.3 NA.



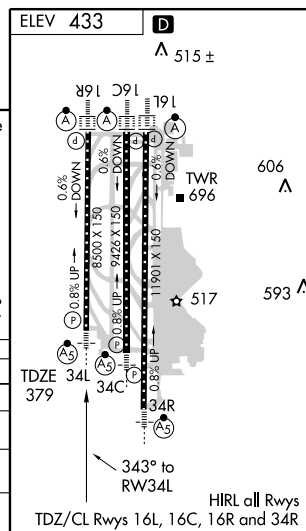
MISSED APPROACH: Climb direct CUSBU to cross CUSBU at or below 2000, then climb to 5000 via track 345° to MGNUM and hold, continue climb-in-hold to 5000.

ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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Procedure NA for arrivals at CIDUG via V495 southbound.

↑	CUSBU 2000	5000	MGNUM	VGSI and RNAV glidepath not coincident.	Procedure Turn NA
*LNAV only	HOVOS 1.6 NM to RW34L	JALON	JOSTA	HIPO	5000
	RW34L	920*	2400	343°	GS 3.00° TCH 55
	1.6 NM	4.5 NM	4.8 NM	2.9 NM	
CATEGORY	A	B	C	D	
LPV DA	579/24		200 (200-½)		
LNAV/VNAV DA	792/50		413 (400-1)		
LNAV MDA	860/24	481 (500-½)	860/40 481 (500-¾)	860/50 481 (500-1)	
CIRCLING	1000-1	567 (600-1)	1000-1½ 567 (600-1½)	1000-2 567 (600-2)	



WAAS CH <b>42710</b> <b>W34A</b>	APP CRS <b>343°</b>	Rwy Idg <b>11901</b> TDZE <b>372</b> Apt Elev <b>433</b>
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# RNAV (GPS) RWY 34R

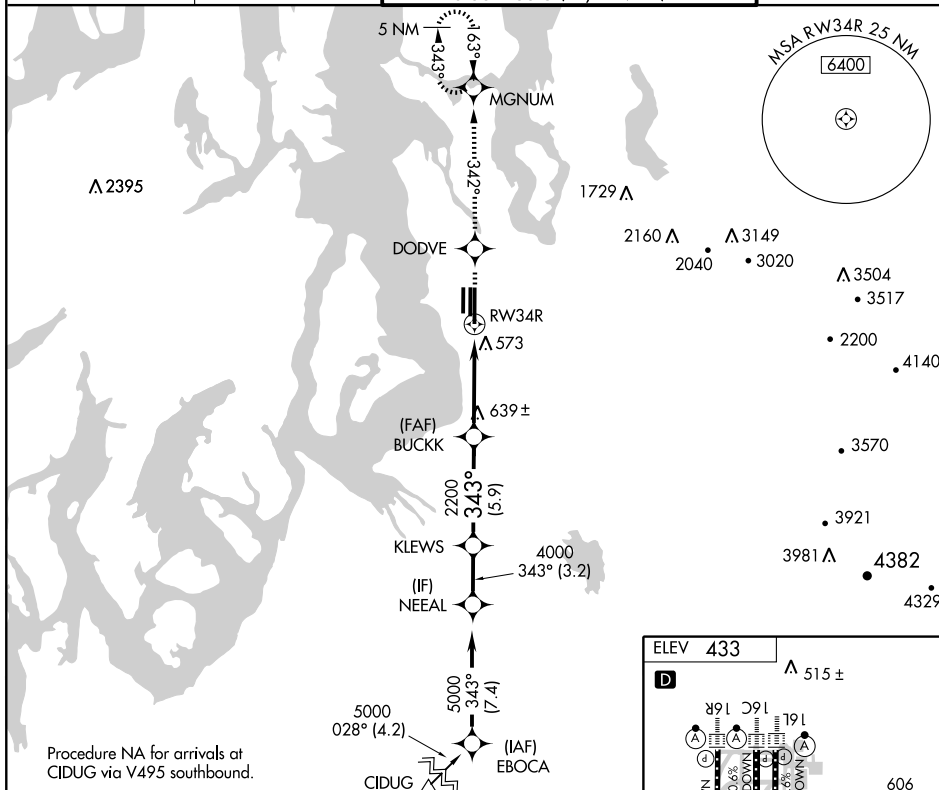
## SEATTLE-TACOMA INTL (SEA)

▼ For inoperative MALSR, increase LPV all Cats. visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP -0.3 NA.

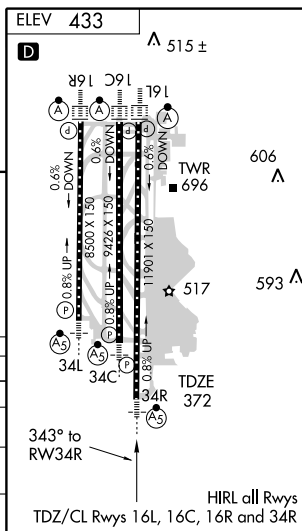


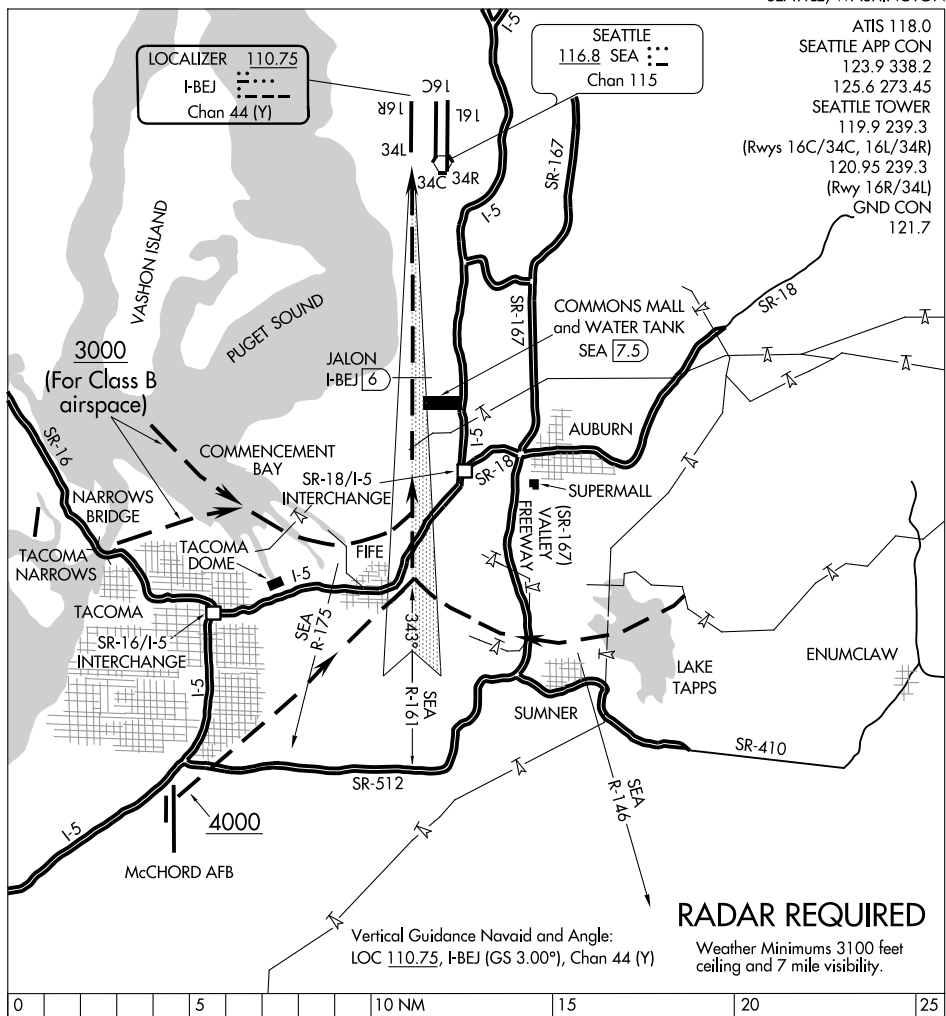
MISSED APPROACH: Climb direct DODVE to cross DODVE at or below 2000, then climb to 5000 via track 342° to MGNUM and hold, continue climb-in-hold to 5000.

ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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	DODVE	5000	MGNUM	VGSI and RNAV glidepath not coincident.	Procedure NEEL Turn NA
	2000	342°			
	*LNAV only	1.6 NM to RW34R			
CATEGORY	A	B	C	D	
LPV DA	622/24	250 (200-½)			
LNAV/VNAV DA	869-1½	497 (500-1½)			
LNAV MDA	900/24	528 (500-½)	900/50 528 (500-1)	900/60 528 (500-1¼)	
CIRCLING	1000-1	567 (600-1)	1000-1½ 567 (600-1½)	1000-2 567 (600-2)	





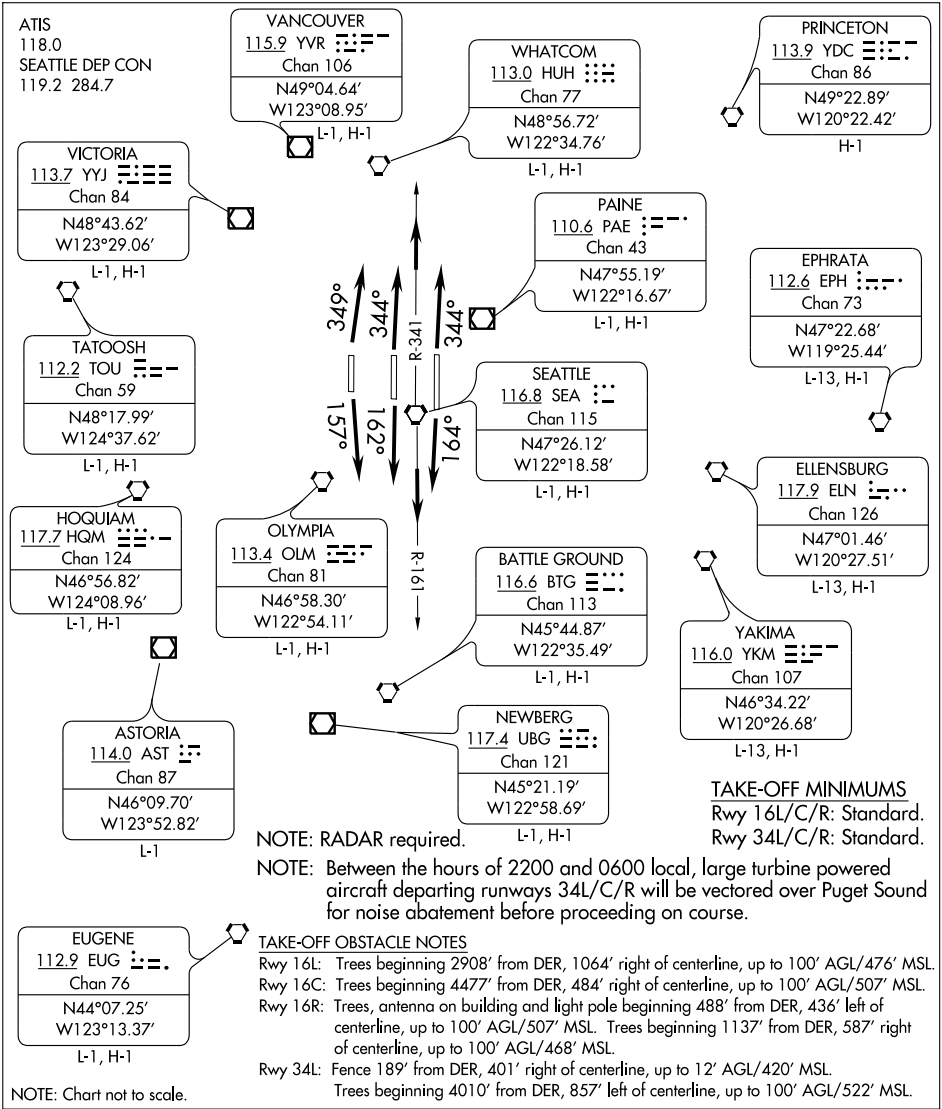
# SALTY VISUAL APPROACH RWY 34L

When the ceiling is at least 3100' and visibility is at least 7 miles, aircraft may be vectored towards Commencement Bay or McChord AFB or Lake Tapps for a Salty Visual Runway 34L Approach. When cleared for this approach; proceed inbound visually using the depicted landmarks to the centerline of runway 34L. Turn final before or over the interchange of State Road 18 (SR-18) and Interstate 5. Be established on the localizer or runway centerline at the Commons Mall and Water Tank (7.5 DME) and proceed visually to runway 34L.

SEATTLE FOUR DEPARTURE

SL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)  
SEATTLE, WASHINGTON



**DEPARTURE ROUTE DESCRIPTION**

TAKE-OFF RUNWAY 34L: Climb heading 349° and SEA R-341, thence. . .

TAKE-OFF RUNWAY 34C/R: Climb heading 344° and SEA R-341, thence. . .

TAKE-OFF RUNWAY 16L: Climb heading 164° and SEA R-161, thence. . .

TAKE-OFF RUNWAY 16C: Climb heading 162° and SEA R-161, thence. . .

TAKE-OFF RUNWAY 16R: Climb heading 157° and SEA R-161, thence. . .

. . . Maintain assigned altitude, expect radar vectors to assigned route.

NW-1, 21 OCT 2010 to 18 NOV 2010

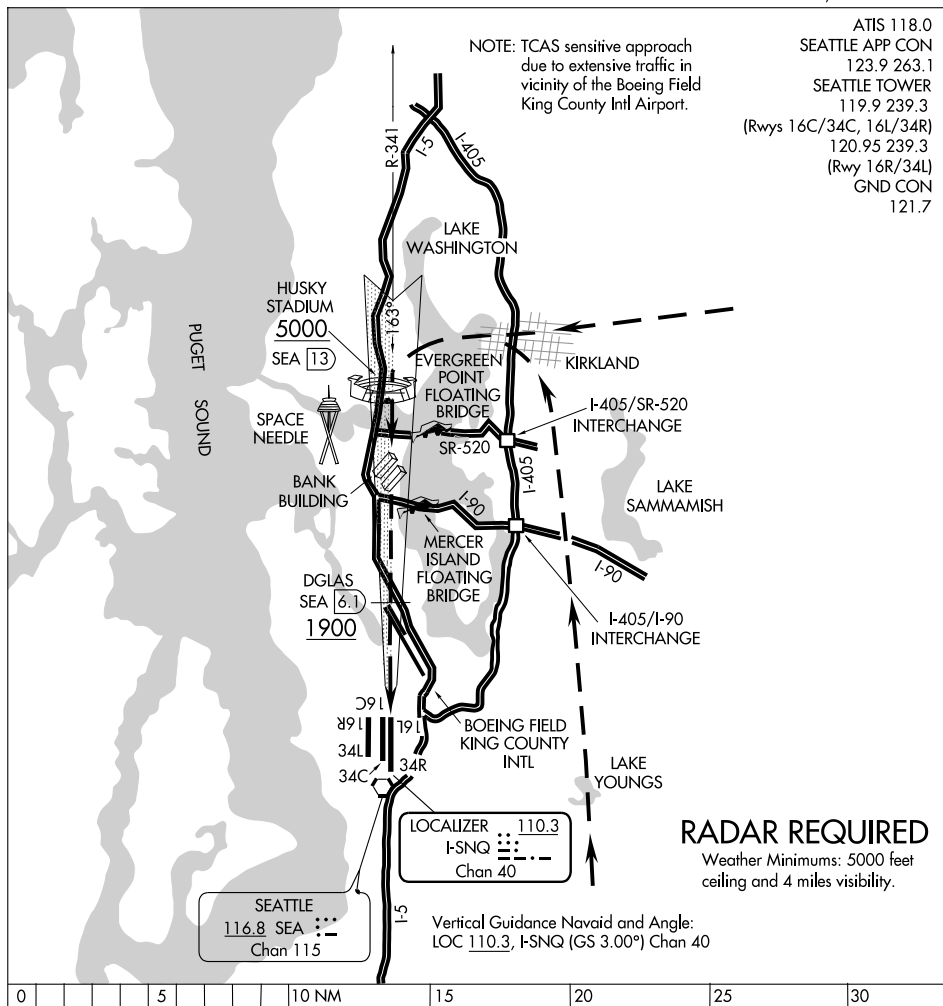
NW-1, 21 OCT 2010 to 18 NOV 2010

## STADIUM VISUAL RWY 16L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)

SEATTLE, WASHINGTON



## STADIUM VISUAL APPROACH RWY 16L

When the ceiling is at least 5000' and visibility is at least 4 miles, aircraft may be vectored over Kirkland or Lake Youngs for a Stadium Visual Runway 16L Approach. When cleared for a Stadium Visual Approach; proceed inbound visually over Husky Stadium (via route depicted); intercept the Runway 16L localizer/SEA R-341 at 13 DME and complete a straight in visual approach to the airport.

## STADIUM VISUAL RWY 16L

47°27'N-122°19'W

SEATTLE, WASHINGTON

SEATTLE-TACOMA INTL (SEA)

## SUMMA SEVEN DEPARTURE

SL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)  
SEATTLE, WASHINGTON

ATIS  
118.0  
SEATTLE DEP CON  
119.2 284.7

SEATTLE  
116.8 SEA :--:  
Chan 115  
N47°26.12' W122°18.58'

NEZUG  
N47°34.12'  
W122°18.58'  
4000

PAINE  
110.6 PAE :--:  
Chan 43

## TAKE-OFF MINIMUMS

Rwys 16L/C/R: Standard.

Rwys 34L/C/R: Standard with minimum climb of 580' per NM to 4000 (ATC).

## TAKE-OFF OBSTACLE NOTES

Rwy 16L: Trees beginning 2908' from DER, 1064' right of centerline, up to 100' AGL/476' MSL.

Rwy 16C: Trees beginning 4477' from DER, 484' right of centerline, up to 100' AGL/507' MSL.

Rwy 16R: Trees, antenna on building and light pole beginning 488' from DER, 436' left of centerline, up to 100' AGL/507' MSL. Trees beginning 1137' from DER, 587' right of centerline, up to 100' AGL/468' MSL.

Rwy 34L: Fence 189' from DER, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from DER, 857' left of centerline, up to 100' AGL/522' MSL.

NEVJO  
N47°15.13'  
W122°18.58'

OLYMPIA  
113.4 OLM :--:  
Chan 81

SUMMA  
N46°37.07'  
W121°59.30'

BAKER CITY  
115.3 BKE :--:  
Chan 100  
N44°50.44' W117°48.47'  
L-13, H-1

LAKEVIEW  
112.0 LKV :--:  
Chan 57  
N42°29.57' W120°30.43'  
L-11, H-3

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34L: Climb heading 346° and SEA R-341, thence. . .TAKE-OFF RUNWAY 34C: Climb heading 343° and SEA R-341, thence. . .TAKE-OFF RUNWAY 34R: Climb heading 342° and SEA R-341, thence. . .

. . . to cross NEZUG at or above 4000, then right turn heading 070° to cross the PAE R-139, then right turn heading 165° to intercept SEA R-146 to SUMMA INT, then via assigned transition.

TAKE-OFF RUNWAYS 16L/C: Climb heading 163° and SEA R-161, thence. . .TAKE-OFF RUNWAY 16R: Climb heading 161° and SEA R-161, thence. . .

. . . to NEVJO, then left turn heading 130° to intercept the SEA R-146 to SUMMA INT, then via assigned transition.

BAKER CITY TRANSITION (SUMMA7.BKE): From over SUMMA INT via OLM R-100 and BKE R-283 to BKE VOR/DME.LAKEVIEW TRANSITION (SUMMA7.LKV): From over SUMMA INT via SEA R-146 and LKV R-327 to LKV VORTAC.

## SUMMA SEVEN DEPARTURE

(SUMMA7.SUMMA) 09015

SEATTLE, WASHINGTON  
SEATTLE-TACOMA INTL (SEA)

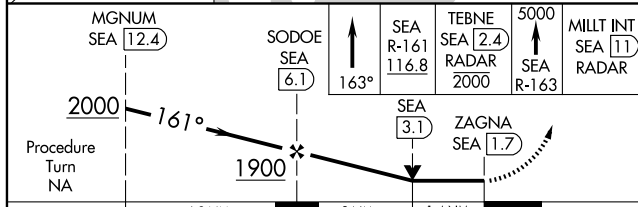
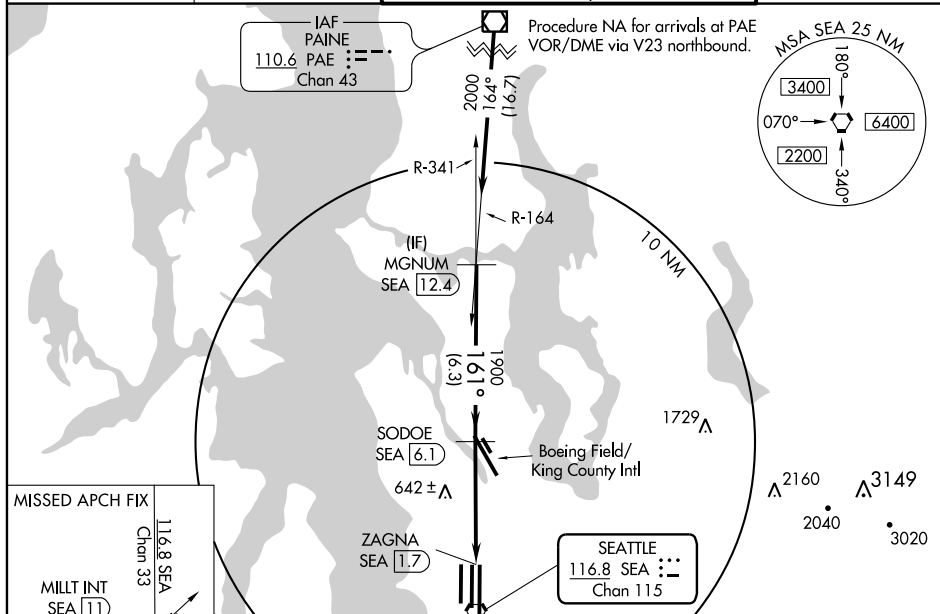
VORTAC SEA <b>116.8</b> Chan <b>115</b>	APP CRS <b>161°</b>	Rwy 16L Idg <b>11901</b> TDZE <b>433</b> Apt Elev <b>433</b>	Rwy 16C Idg <b>9426</b> TDZE <b>430</b> Apt Elev <b>433</b>
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# VOR/DME RWY 16L/C

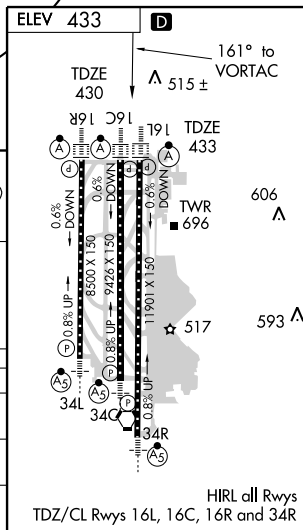
## SEATTLE-TACOMA INTL (SEA)

<p>See additional requirements on adjacent information page.</p>	<p>ALSF-2 Rwy 16L/C</p>	<p>MISSED APPROACH: Climb heading 163° and SEA VORTAC R-161 to cross TEBNE/2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA R-163 to MILT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.</p>
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<p>ATIS <b>118.0</b></p>	<p>SEATTLE APP CON <b>133.65 273.45</b></p>	<p>SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)</p>	<p>GND CON <b>121.7</b></p>
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CATEGORY	A	B	C	D
S-16L	960/24 527 (600-1/2)		960/50 527 (600-1)	960/60 527 (600-1 1/4)
S-16C	960/24 530 (600-1/2)		960/50 530 (600-1)	960/60 530 (600-1 1/4)
CIRCLING	1000-1 567 (600-1)		1000-1 567 (600-1 1/2)	1000-2 567 (600-2)



**SEATTLE-TACOMA INTL AIRPORT****ALERT NOTICE****ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

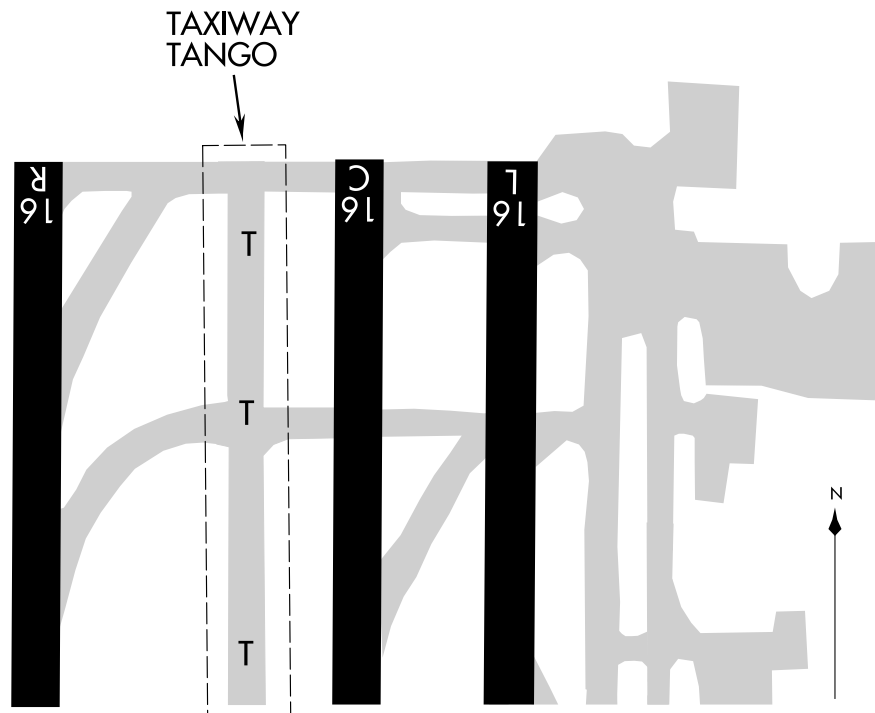
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**


Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



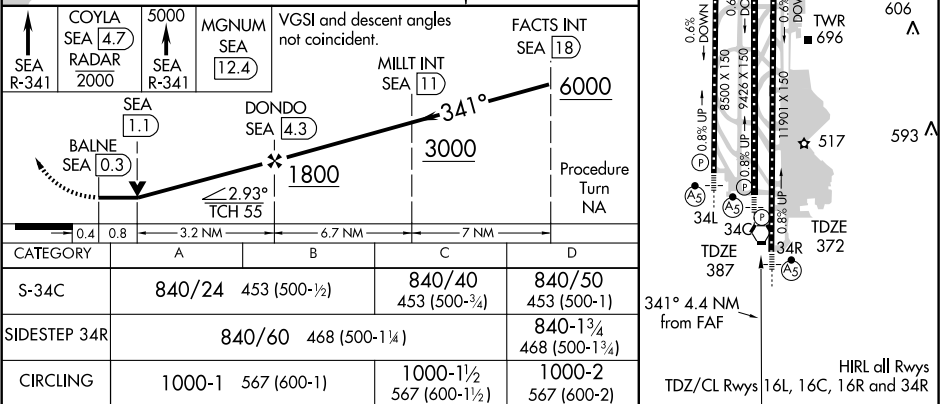
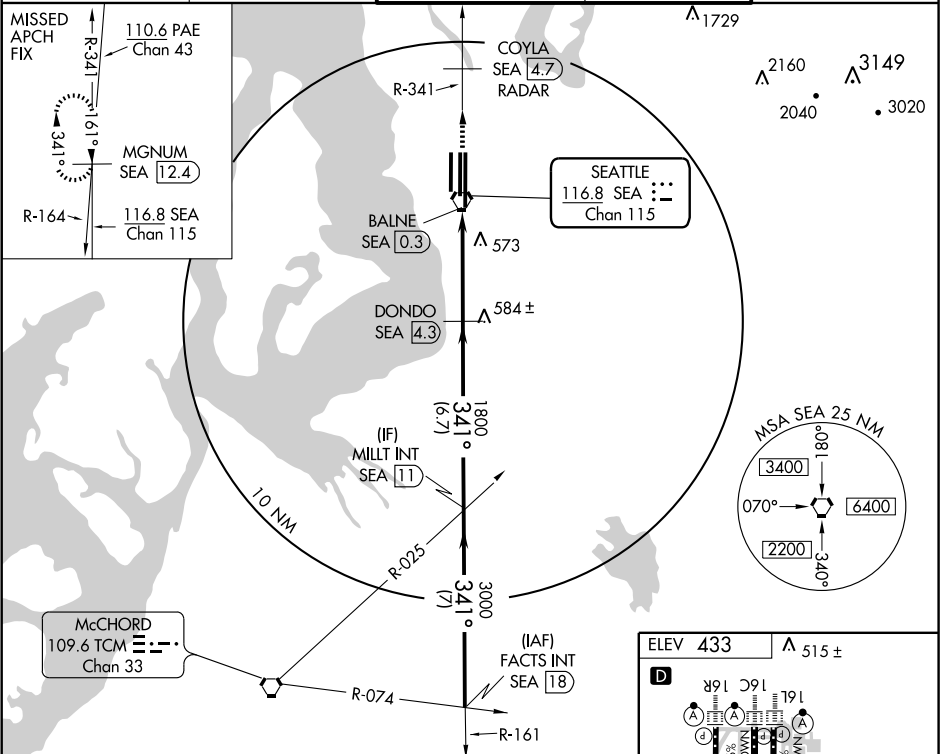


VORTAC SEA <b>116.8</b> Chan <b>115</b>	APP CRS <b>341°</b>	Rwy 34C Idg <b>9426</b> TDZE <b>387</b> Apt Elev <b>433</b>	Rwy 34R Idg <b>11901</b> TDZE <b>372</b> Apt Elev <b>433</b>
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VOR/DME RWY 34C  
SEATTLE-TACOMA INTL (SEA)

<p>Inoperative table does not apply to sidestep 34R Cats. A and B.</p>	<p>MALSR Rwy 34C/R</p> 	<p>MISSED APPROACH: Climb via SEA R-341 to cross COYLA/4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA R-341 to MGNUM/SEA 12.4 DME and hold, continue climb-in-hold to 5000.</p>
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ATIS <b>118.0</b>	SEATTLE APP CON <b>133.65 273.45</b>	SEATTLE TOWER <b>119.9 239.3</b> (Rwys 16C/34C, 16L/34R) <b>120.95 239.3</b> (Rwy 16R/34L)	GND CON <b>121.7</b>
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SEATTLE, WASHINGTON  
Amdt 1B 10098

47°27'N-122°19'W

SEATTLE-TACOMA INTL (SEA)  
VOR/DME RWY 34C

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

## SHELTON

**SANDERSON FLD** (SHN) 3 NW UTC-8(-7DT) N47°14.01' W123°08.85'

273 B S4 FUEL 100LL, JET A NOTAM FILE SHN

RWY 05-23: H5005X100 (ASPH) S-55, D-72, 2D-130 MIRL 0.3% up NE

RWY 05: Trees. Rgt tfc.

RWY 23: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees.

**AIRPORT REMARKS:** Attended 1600-0030Z±. Parachute Jumping. 24 hr credit card fuel facility.

**WEATHER DATA SOURCES:** ASOS 119.275 (360) 427-3835.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ SEATTLE APP/DEP CON 121.1

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLM.

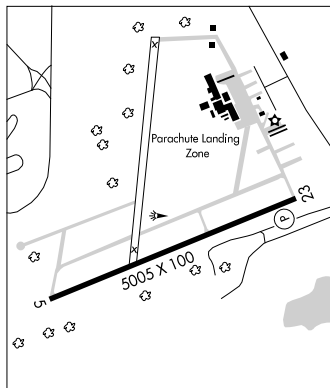
OLYMPIA (H) VORTACW 113.4 OLM Chan 81 N46°58.30'

W122°54.11' 308° 18.7 NM to fld. 200/19E. HIWAS.

MASON CO NDB (MHW) 348 MNC N47°14.89' W123°05.18'

232° 2.7 NM to fld. NOTAM FILE SHN.

NDB unmonitored. NDB unusable 280°-340° beyond 20 NM.



SEATTLE

H-1B, L-1D

IAP

## SILVERDALE

**APEX AIRPARK** (8W5) 2 NW UTC-8(-7DT) N47°39.41' W122°43.99'

525 B S4 NOTAM FILE SEA

Not insp.

RWY 17-35: H2500X28 (ASPH) LIRL

RWY 35: Rgt tfc.

**AIRPORT REMARKS:** Attended continuously. Caution: children and pets etc on invof arpt. No line of sight between rwy ends. Twy east side rwy. Use caution on twy. Trees, acft and buildings in transition sfcs.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

SEATTLE

**SKAGIT/BAY VIEW** N48°28.12' W122°25.10'. NOTAM FILE BVS.

NDB (MHW) 240 BVS at Skagit Rgnl. NDB unusable 350°-030° byd 20 NM.

SEATTLE

L-1E

**SKAGIT RGNL** (See BURLINGTON/MOUNT VERNON)

**SKY HARBOR** (See SULTAN)

**SKYLINE SPB** (See ANACORTES)

**SKYKOMISH STATE** (S88) 1 E UTC-8(-7DT) N47°42.66' W121°20.34'

1002 NOTAM FILE SEA

RWY 06-24: 2050X100 (TURF)

RWY 06: Trees. RWY 24: Trees.

**AIRPORT REMARKS:** Unattended. CLOSED yearly 1 Oct-1 June. Vehicles, pedestrians and animals on and invof rwy.

CTC Washington State Division of Aeronautics 360-651-6300 or 1-800-552-0666, for facility information prior to use. Mountains surround arpt. Rwy soft when wet.

**COMMUNICATIONS:** CTAF 122.9

SEATTLE

**SNOHOMISH CO (PAINE FLD)** (See EVERETT)

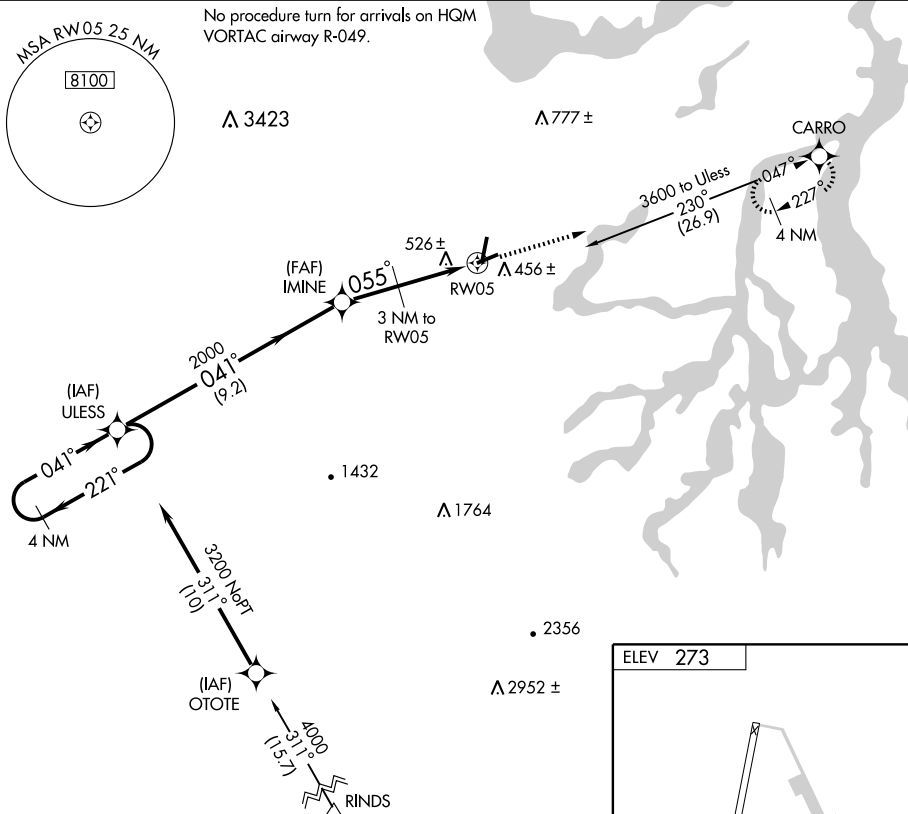
APP CRS	Rwy Idg	<b>5005</b>
<b>055°</b>	TDZE	<b>270</b>
	Apt Elev	<b>273</b>

GPS RWY 5

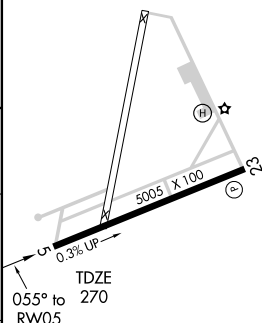
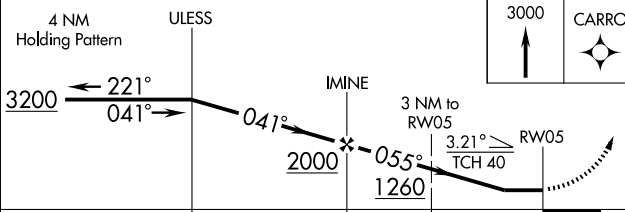
SHELTON/ SANDERSON FIELD (SHN)



MISSED APPROACH: Climb to 3000 direct CARRO WP and hold.

ASOS  
**119.275**SEATTLE APP CON  
**121.1 290.9**UNICOM  
**122.8** (CTAF)No procedure turn for arrivals on HQM  
VORTAC airway R-049.

ELEV 273



CATEGORY	A	B	C	D
S-5	780-1	510 (600-1)	780-1½ 510 (600-1½)	780-1¾ 510 (600-1¾)
CIRCLING	840-1	567 (600-1)	940-2 667 (700-2)	1000-2¼ 727 (800-2¼)

REIL Rwy 23  
MIRL Rwy 5-23

SHELTON, WASHINGTON

Amdt 1A 09295

SHELTON/ SANDERSON FIELD (SHN)

47°14'N - 123°09'W

GPS RWY 5

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy ldg	<b>5005</b>
<b>229°</b>	TDZE	<b>273</b>
	Apt Elev	<b>273</b>

## GPS RWY 23

SHELTON/ SANDERSON FIELD (SHN)

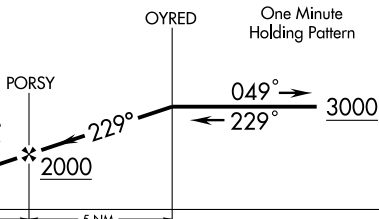
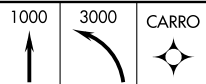
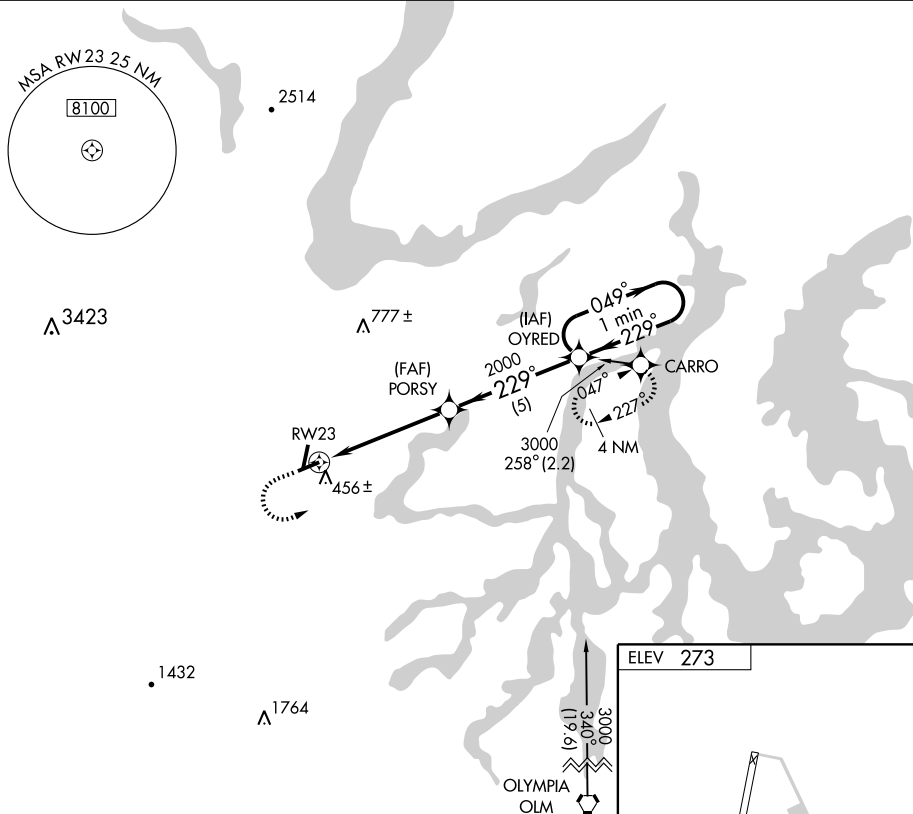


MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 direct CARRO WP and hold.

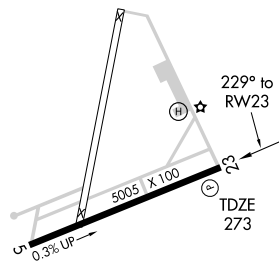
ASOS  
**119.275**

SEATTLE APP CON  
**121.1 290.9**

UNICOM  
**122.8** (CTAF)



ELEV 273



CATEGORY	A	B	C	D
S-23	860-1	587 (600-1)	860-1½ 587 (600-1½)	860-1¾ 587 (600-1¾)
CIRCLING	860-1	587 (600-1)	940-2 667 (700-2)	1000-2¼ 727 (800-2¼)

REIL Rwy 23  
MIRL Rwy 5-23

NDB MNC <b>348</b>	APP CRS <b>232°</b>	Rwy Idg TDZE Apt Elev	N/A N/A <b>273</b>
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# NDB or GPS-A

## SHELTON/ SANDERSON FIELD (SHN)



MISSED APPROACH: Climb to 1200 then climbing left turn to 3000 direct MNC NDB and hold.

ASOS  
**119.275**

SEATTLE APP CON  
**121.1 290.9**

UNICOM  
**122.8** (CTAF)

• 5054

• 2514

KITSAP  
206 PWT **3-3-3**

△ 3423

△ 777 ±

IAF  
MASON COUNTY  
348 MNC **3-3-3**

(MARKP)

472 ±  
456 ±

232°

277°  
097°

052°

1400 NoPT  
235° (9.7)



ELEV 273

△ 1764

10 NM

3000  
317°  
(18.8-2)

OLYMPIA  
113.4 OLM **3-3-3**  
Chan 81

• 2356

1200

3000

MNC  
348

NDB

Remain within 10 NM

052°

1900

(MARKP)

4.60°  
TCH 35

1400

VGSI and descent angles not coincident.

5005 X 100  
232° 2.2 NM from FAF  
0.3% UP

REIL Rwy 23  
MIRL Rwy 5-23

FAF to MAP 2.2 NM

Knots	60	90	120	150	180
Min:Sec	2:12	1:28	1:06	0:53	0:44

CATEGORY

A

B

C

D

CIRCLING

900-1

627 (700-1)

940-2  
667 (700-2)

1000-2¼  
727 (800-2¼)

SHELTON, WASHINGTON

Amdt 2 08157

SHELTON/ SANDERSON FIELD (SHN)

47°14'N-123°09'W

# NDB or GPS-A

## SNOHOMISH

**HARVEY FLD** (S43) 1 SW UTC-8(-7DT) N47°54.29' W122°06.16'

SEATTLE

22 S4 FUEL 100, JET A TPA-1006(984) NOTAM FILE SEA

L-1D

RWY 15L-33R: H2671X36 (ASPH) S-10 LIRL (NSTD)

IAP

RWY 15L: TRCV (TRIR)—GA 5.0° TCH 30'. Thld dsplcd 451'. P-line. Rgt tfc.

RWY 33R: TRCV (TRIR)—GA 3.0° TCH 30'. Thld dsplcd 241'. Trees.

RWY 15R-33L: 2430X100 (TURF)

RWY 15R: P-line. Rgt tfc.

RWY 33L: Trees.

**AIRPORT REMARKS:** Attended Nov-Mar 1530-0200Z†, Apr-Oct 1530-0500Z†. Fuel 24 hour credit card svc avbl.

Parachute Jumping. Helicopter training west of rwy 500' and blo. High voltage P-line 22' high 25' from apch end of Rwy 15L. Additional parachute student drop zone 1 NM E of arpt marked with white X. Arriving helicopter tfc apch helipads from NE or SE to avoid student drop zone. Parachute drop zone between Rwy 15L-33R and main twy, large gravel circle. Rwy 15L and Rwy 15R calm wind rwy. Noise abatement procedures in effect, ctc arpt manager 360-568-1541. Rwy 15L-33R NSTD LIRL, thld lgts 360° green.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

SEATTLE CENTER APP/DEP CON 128.5

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PAE.

PAINE (L) VORW/DME 110.6 PAE Chan 43 N47°55.19' W122°16.67' 077° 7.1 NM to fld. 670/20E.

## SOUTH BEND (RAYMOND)

**WILLAPA HARBOR** (2S9) 2 NW UTC-8(-7DT) N46°41.86' W123°49.40'

SEATTLE

13 B FUEL 100LL NOTAM FILE SEA

L-1C

RWY 11-29: H3005X52 (ASPH) S-12 MIRL

RWY 11: Trees.

RWY 29: Trees.

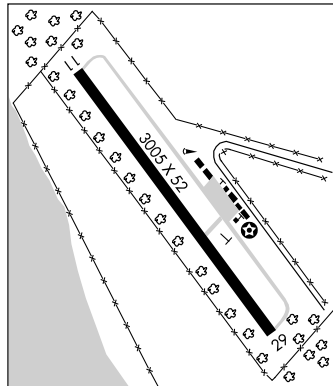
**AIRPORT REMARKS:** Unattended. Fuel unavbl indef. Watch for elk on and in vicinity of arpt. Rwy 11-29 52' wide with 22.5' asph trtd shoulders. Rotating bcn OTS indef. ACTIVATE rotating bcn-122.8. ACTIVATE MIRL Rwy 11-29-122.8.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HQM.

HOQUIAM (H) VORTAC 117.7 HQM Chan 124 N46°56.82'

W124°08.96' 119° 20.1 NM to fld. 10/19E. HIWAS.



**SOUTHWEST WASHINGTON RGNL** (See KELSO)

## SPANAWAY

**SHADY ACRES** (3B8) 3 SE UTC-8(-7DT) N47°04.22' W122°22.27'

SEATTLE

445 NOTAM FILE SEA

RWY 16-34: H1800X20 (ASPH) LIRL

RWY 16: Trees.

RWY 34: Thld dsplcd 200'. Road. Rgt tfc.

**AIRPORT REMARKS:** Unattended. PPR for night ops call arpt manager 253-846-8953. Military activity on and in vicinity of arpt. Power plants with emissions that may not be visible 0.5 and 1 statute mile northeast of arpt. Dsplcd thld marked with NSTD chevrons. Rwy 16 ID is not standard distance from rwy end. Directional rwy edge lgts.

**COMMUNICATIONS:** CTAF 122.9

**SPANAWAY** (S44) 1 S UTC-8(-7DT) N47°05.21' W122°25.88'

SEATTLE

373 FUEL 100LL TPA-988(615) NOTAM FILE SEA

RWY 16-34: H2724X20 (ASPH) S-12 LIRL

RWY 16: Thld dsplcd 200'. Tree.

RWY 34: Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended 1600Z†-dusk. CAUTION: Military tfc on and in vicinity of arpt. Rwy 16 paved, Rwy 16 has NSTD numbers, edge lines and thld markings only, Rwy 16 number located 300' S of painted dsplcd thld.

**COMMUNICATIONS:** CTAF 122.9

® SEATTLE APP/DEP CON 126.5

APP CRS <b>328°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>22</b>
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# RNAV (GPS)-A

SNOHOMISH/HARVEY FIELD (S43)

▼ DME/DME RNP-0.3 NA.

▲ NA

Procedure NA at night.

Use Arlington altimeter setting. When not received, use Everett altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 2000 direct USUXY and via 333° track to WATON LOM and hold.

ARLINGTON AWOS-3  
**135.625**

SEATTLE CENTER  
**128.5 306.9**

UNICOM  
**123.0 (CTAF)**

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

PAINE PAE

787

Λ 660

Λ 787

USUXY

Λ 304 ±

RW33R

Λ 370 ±

Λ 610

Λ 843 ±

• 737

740

Λ

(FAF)

DEDBE

Λ 678

Λ 1655

• 1480

• 3580 •

2000

350°

(8.7)

(IF/IAF)  
HAVHO

170°

350°

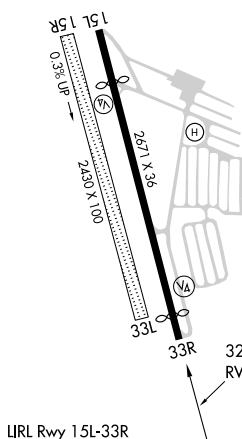
4 NM

MISSED APCH FIX

WATON  
AW



ELEV 22



LURL Rwy 15L-33R

2000

↑

USUXY

✧

333°

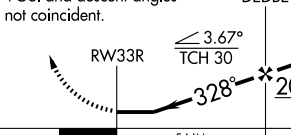
track

AW

✧

VGSI and descent angles not coincident.

DEDBE



5 NM 8.7 NM

CATEGORY A B C D

CIRCLING 1220-1¼ 1198 (1200-1¼) 1220-1½ 1198 (1200-1½) NA

HAVHO

4 NM  
Holding Pattern

170° 3100

350°

350°

350°

350°

350°

350°

350°

350°

350°

350°

350°

350°

350°





**SPOKANE INTL** (GEG) 5 SW UTC-8(-7DT) N47°37.14' W117°32.11'

SEATTLE

2385 B S4 FUEL 100, 100LL, JET A OX 1, 2, 3, 4 Class I, ARFF Index B NOTAM FILE GEG H-1C, L-13B

RWY 03-21: H11002X150 (ASPH-GRVD) S-200, D-200, 2S-175, 2D-400 HIRL CL IAP, AD

RWY 03: ALSF2. TDZL. VASI(V6L)—Upper GA 3.25° TCH 87', Lower GA 3.0° TCH 54'. Rgt tfc. 0.5% down.

RWY 21: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 46'. Ground. Rgt tfc. 0.7% up.

RWY 07-25: H8199X150 (ASPH-GRVD) S-150, D-180, 2S-175, 2D-280 MIRL

RWY 07: REIL. VASI(V4L)—GA 3.2° TCH 60'. Rgt tfc.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 50'. Tree.

**LAND AND HOLD SHORT OPERATIONS**

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 07	03-21	2800
RWY 21	07-25	7000
RWY 25	03-21	4350

**RUNWAY DECLARED DISTANCE INFORMATION:**

RWY 07: TORA-8199 TODA-8199 ASDA-8199 LDA-8199

RWY 21: TORA-11002 TODA-11002 ASDA-11002 LDA-11002

RWY 25: TORA-8199 TODA-8199 ASDA-8199 LDA-8199

**AIRPORT REMARKS:** Attended 1400-0600Z†. Waterfowl and birds on and in/ovf arpt. Twy H restricted to wingspan of 75' or less. Twy K unlighted on ramp side along maintenance ramp and is unavailable below 1200 RVR unless under escort by "follow me". Rwy 03 VFR only. Rwy 21 ALSF2 may be operated as SSALR during favorable weather conditions. Be alert to turbulence over smoke stacks 1 mile E of arpt. U.S. Customs user fee arpt. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** ASOS (509) 624-4406. HIWAS 115.5 GEG.

**COMMUNICATIONS:** ATIS 124.325 UNICOM 122.95

RCO 122.65 122.55 122.2 (SEATTLE RADIO)

(R) APP/DEP CON 133.35 (026°-204°) 123.75 (205°-025°)

TOWER 118.3 GND CON 121.9 CLNC DEL 127.55

**AIRSPACE:** CLASS C svc ctc APP CON

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GEG.

(H) VORTACW 115.5 GEG Chan 102 N47°33.90' W117°37.61' 028° 4.9 NM to fld. 2756/21E. HIWAS.

VOR portion unusable:

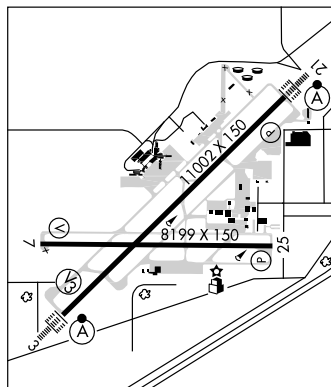
360°-015° byd 26 NM blo 7,000' 335°-360° byd 18 NM blo 7,000'

300°-330° byd 30 NM blo 9,000' 335°-360° byd 25 NM

CANYON NDB (MHW) 388 CRK N47°40.62' W117°27.01' 205° 4.8 NM to fld.

ILS/DME 111.1 I-GEG Chan 48 Rwy 21. Class IIIE.

ILS/DME 111.1 I-OLJ Chan 48 Rwy 03. Class IIIE.


**STAMPEDE PASS SMP** N47°15.98' W121°22.07'/3964.

SEATTLE

ASOS 135.275 360-886-2758

L-1D

**STANWOOD**
**CAMANO ISLAND AIRFIELD** (13W) 3 NW UTC-8(-7DT) N48°15.42' W122°26.17'

SEATTLE

145 S4 NOTAM FILE SEA

RWY 16-34: H1750X24 (ASPH)

RWY 16: Tree. Rgt tfc. RWY 34: Brush. Rgt tfc.

**AIRPORT REMARKS:** Attended Mon-Fri 1630-0130Z†. Do not taxi on grass Oct-May. Parallel driveway adjacent to Rwy 16-34.

**COMMUNICATIONS:** CTAF 122.9

**STARBUCK**
**LITTLE GOOSE LOCK AND DAM** (16W) 7 NE UTC-8(-7DT) N46°34.99' W118°00.06'

SEATTLE

681 NOTAM FILE SEA

RWY 07-25: 3400X50 (GRVL)

RWY 07: Road. RWY 25: Hill.

**AIRPORT REMARKS:** Unattended. CLOSED 1 Oct-1 June. CAUTION: Airport located in canyon rolling terrain 700-800' S rising to 750', canyon wall 800' S rises steeply to 1800'+, N wall rises to 1600'+. Pedestrians, vehicles, and animals on and in/ovf rwy. Portions of rwy sfc rough and soft. CTC Washington State Aviation Division 360-651-6300 or 1-800-552-0666 for facility information prior to use.

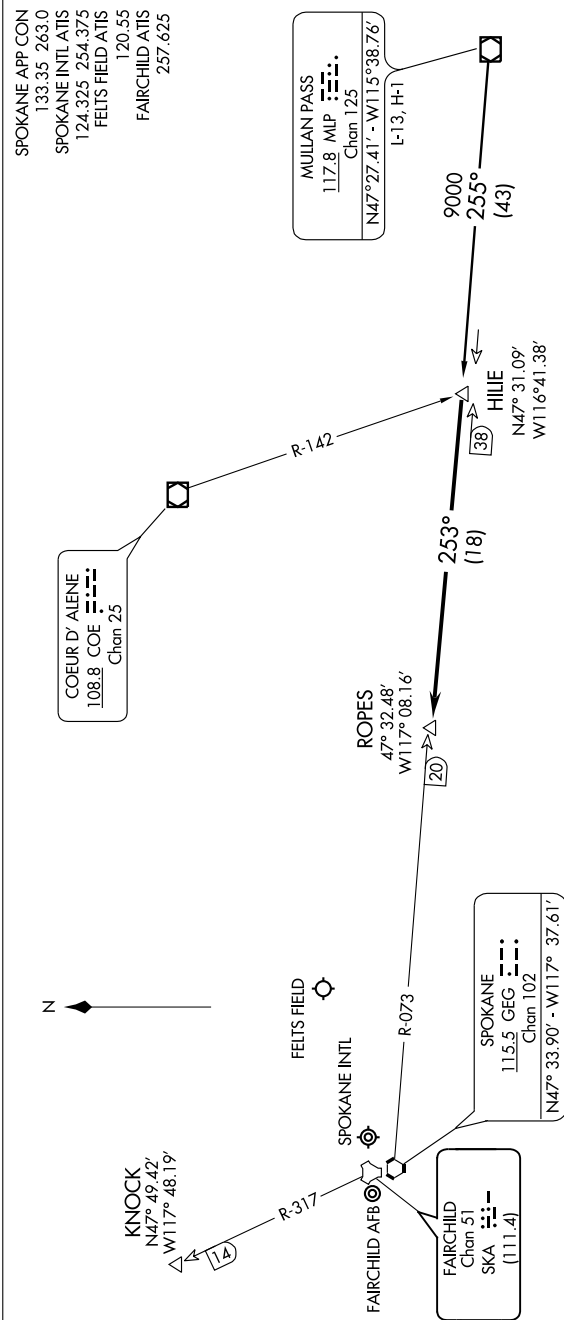
**COMMUNICATIONS:** CTAF 122.9

## HILIE ONE ARRIVAL (HILIE.HILIE1)

ST-403 (FAA)

SPOKANE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



NOTE: DME and RADAR required.  
NOTE: Chart not to scale.

MULAN PASS TRANSITION (MLP.HILIE1): From over MLP VOR/DME via MLP R-255 to HILIE INT. Thence. . . .

. . . . From over HILIE INT via GEG R-073 to ROPES INT. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: After ROPES INT:

Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-073, maintain last assigned altitude to GEG.

Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

## HILIE ONE ARRIVAL (HILIE.HILIE1)

SPOKANE, WASHINGTON



LOC/DME I-OLJ <b>111.1</b> Chan 48	APP CRS <b>027°</b>	Rwy Idg TDZE <b>2371</b> Apt Elev <b>2376</b>	<b>11002</b> <b>2371</b> <b>2376</b>
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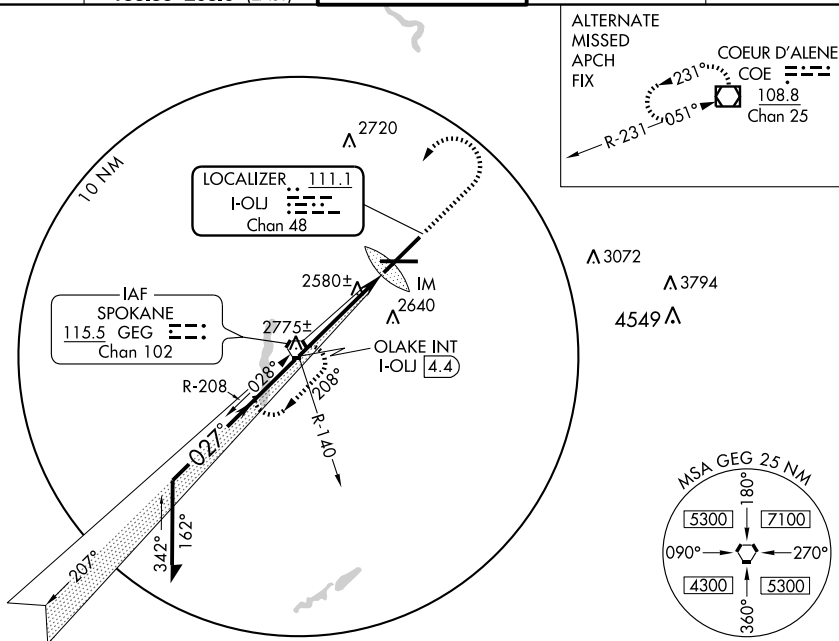
# ILS or LOC RWY 3

## SPOKANE INTL (GEG)

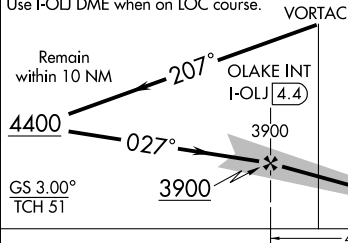


MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

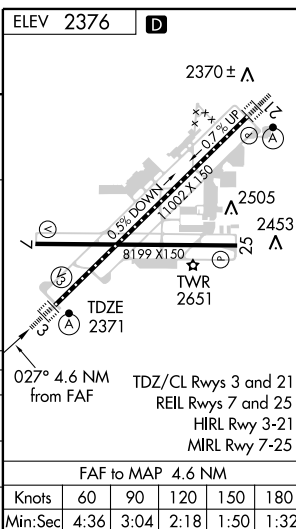
ATIS <b>124.325 254.375</b>	SPOKANE APP CON <b>123.75 282.25 (WEST)</b> <b>133.35 263.0 (EAST)</b>	SPOKANE TOWER <b>118.3 278.3</b>	GND CON <b>121.9 348.6</b>	CLNC DEL <b>127.55</b>
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VGSI and ILS glidepath not coincident.  
Use I-OLJ DME when on LOC course.



CATEGORY	A	B	C	D
S-ILS 3	2571/18 200 (200-½)			
S-LOC 3	2880/24 509 (600-½)		2880/50 509 (600-1)	
CIRCLING	2960-1 584 (600-1)		2960-1½ 584 (600-1½)	2980-2 604 (700-2)



LOC/DME I-OLJ <b>111.1</b> Chan 48	APP CRS <b>027°</b>	Rwy Idg TDZE Apt Elev	<b>11002</b> <b>2371</b> <b>2376</b>
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# ILS RWY 3 (CAT II)

## SPOKANE INTL (GEG)



ALSF-2



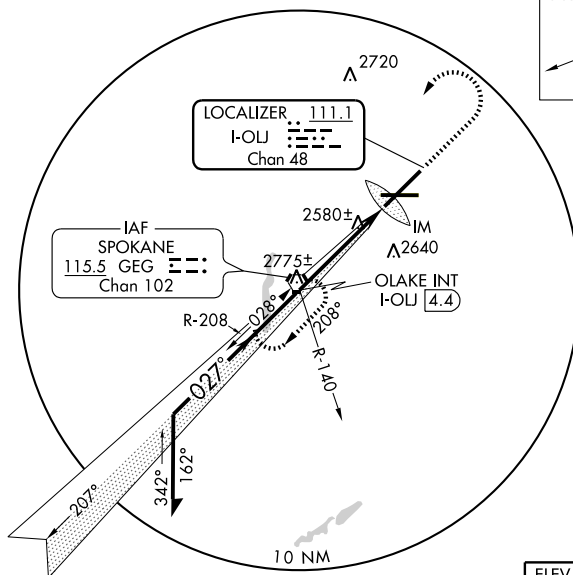
MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

ATIS <b>124.325 254.375</b>	SPOKANE APP CON <b>123.75 282.25 (WEST)</b> <b>133.35 263.0 (EAST)</b>	SPOKANE TOWER <b>118.3 278.3</b>	GND CON <b>121.9 348.6</b>	CLNC DEL <b>127.55</b>
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ALTERNATE  
MISSED  
APCH  
FIX

COEUR D'ALENE  
COE   
108.8  
Chan 25

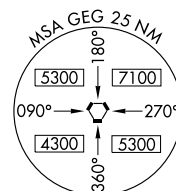
R-231-051°



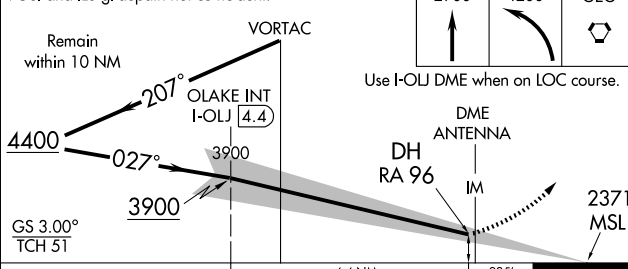
Λ 3072

Λ 3794

4549 Λ



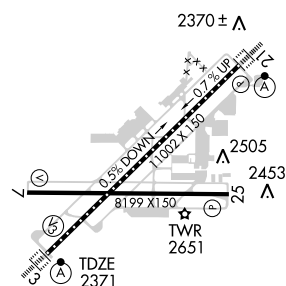
VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 3				
		RA 96/12 100	DA 2471	

### CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 2376



TDZ/CL Rwy 3 and 21  
REIL Rwy 7 and 25  
HIRL Rwy 3-21  
MIRL Rwy 7-25

LOC/DME I-OLJ <b>111.1</b> Chan 48	APP CRS <b>027°</b>	Rwy Idg TDZE Apt Elev	<b>11002</b> <b>2371</b> <b>2376</b>
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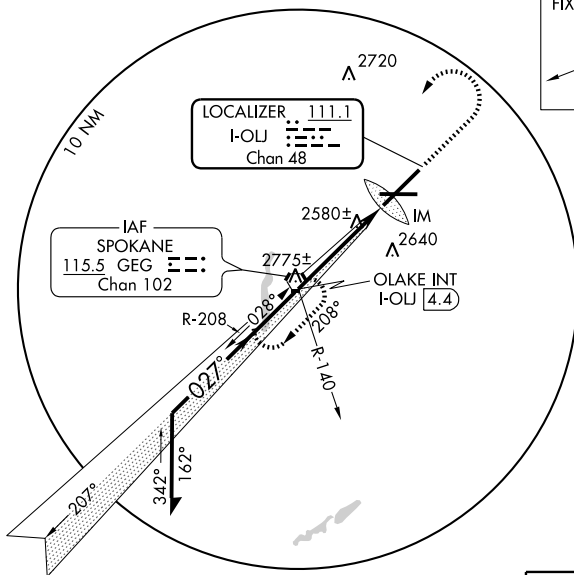
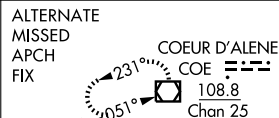
# ILS RWY 3 (CAT III)

## SPOKANE INTL (GEG)



MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

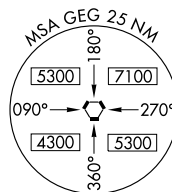
ATIS <b>124.325 254.375</b>	SPOKANE APP CON <b>123.75 282.25 (WEST)</b> <b>133.35 263.0 (EAST)</b>	SPOKANE TOWER <b>118.3 278.3</b>	GND CON <b>121.9 348.6</b>	CLNC DEL <b>127.55</b>
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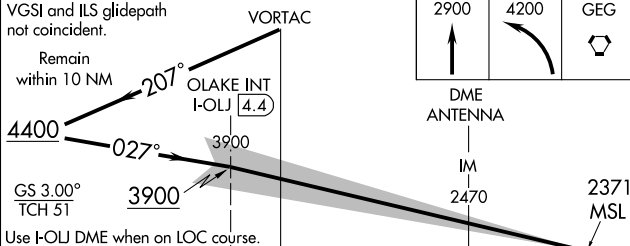
3072

3794

4549

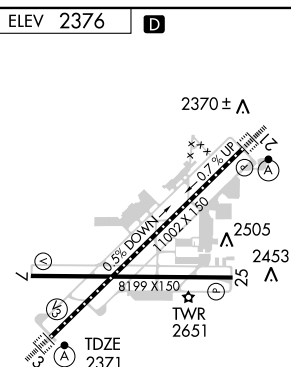


VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 3			CAT IIIa RVR 700	
S-ILS 3			CAT IIIb RVR 600	
S-ILS 3			CAT IIIc NA	

### CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwy 3 and 21

REIL Rwy 7 and 25

HIRL Rwy 3-21

MIRL Rwy 7-25

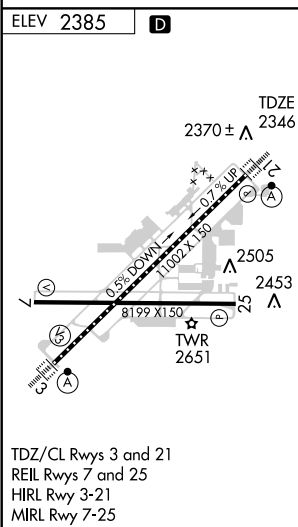
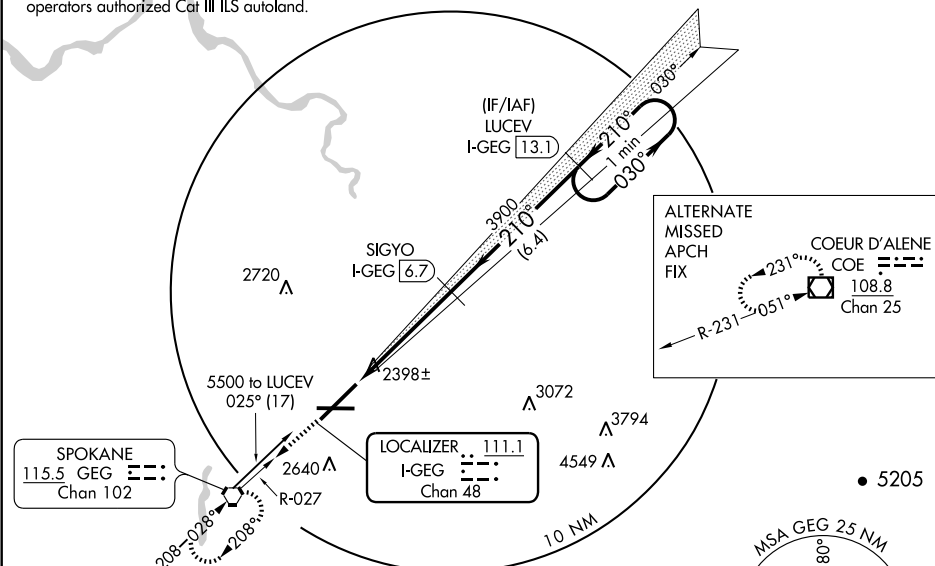
LOC/DME I-GEG <b>111.1</b> Chan <b>48</b>	APP CRS <b>210°</b>	Rwy Idg TDZE <b>2346</b> Apt Elev <b>2385</b>	<b>11002</b> <b>2346</b> <b>2385</b>
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# ILS RWY 21 (CAT II)

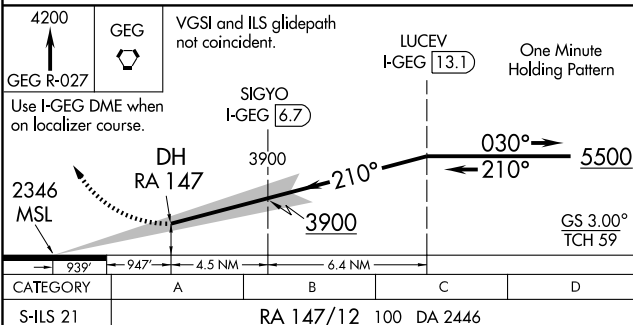
## SPOKANE INTL (GEG)

<b>V</b> RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.		<b>ALSF-2</b> 	<b>MISSED APPROACH:</b> Climb to 4200 on GEG VORTAC R-027 to GEG VORTAC and hold, or as directed by ATC.	
<b>ATIS</b> <b>124.325 254.375</b>	<b>SPOKANE APP CON</b> <b>123.75 282.25 (WEST)</b> <b>133.35 263.0 (EAST)</b>	<b>SPOKANE TOWER</b> <b>118.3 278.3</b>	<b>GND CON</b> <b>121.9 348.6</b>	<b>CLNC DEL</b> <b>127.55</b>

Autoland NA when weather below 300/1 except for operators authorized Cat III ILS autoland.



### DME REQUIRED

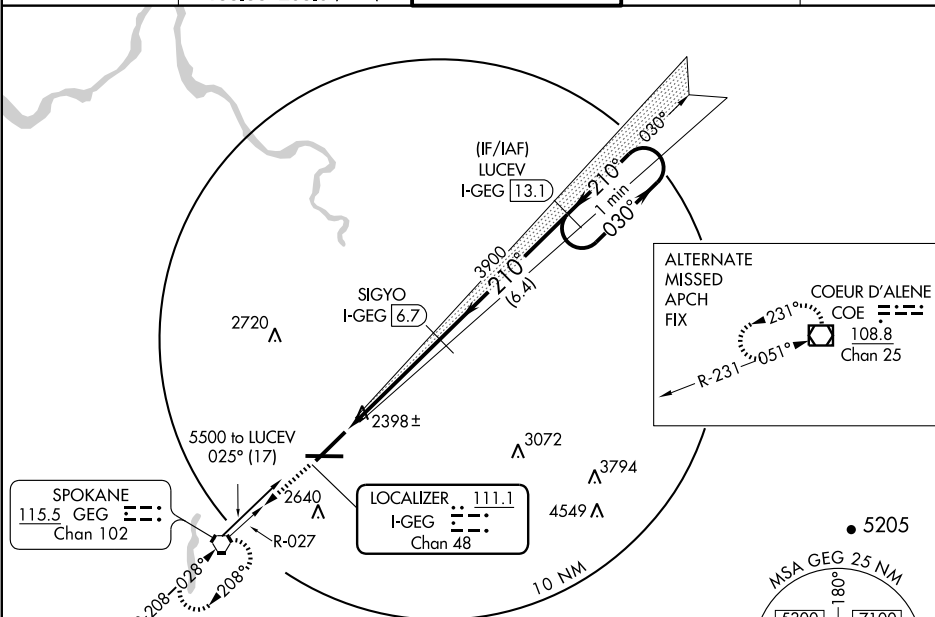


**CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

LOC/DME I-GEG <b>111.1</b> Chan <b>48</b>	APP CRS <b>210°</b>	Rwy Idg TDZE Apt Elev	<b>11002</b> <b>2346</b> <b>2385</b>
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**ILS RWY 21 (CAT III)**  
SPOKANE INTL (GEG)

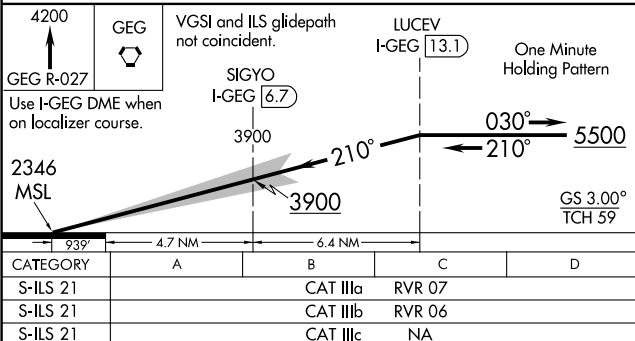
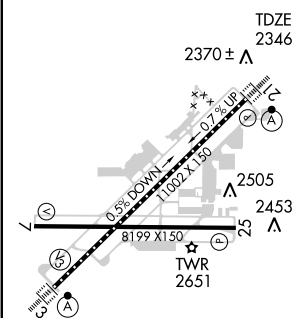
		MISSED APPROACH: Climb to 4200 on GEG VORTAC R-027 to GEG VORTAC and hold, or as directed by ATC.		
ATIS <b>124.325 254.375</b>	SPOKANE APP CON <b>123.75 282.25 (WEST)</b> <b>133.35 263.0 (EAST)</b>	SPOKANE TOWER <b>118.3 278.3</b>	GND CON <b>121.9 348.6</b>	CLNC DEL <b>127.55</b>



ELEV 2385



## SPECIAL AUTOLAND EVALUATION REQUIRED DME REQUIRED



## CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
BOZEMAN, MT GALLATIN FIELD (BZN)	12	03-21	6,841 feet
MOSES LAKE, WA GRANT COUNTY INTL (MWH)	04 14L 22 32R	14L-32R 04-22 14L-32R 04-22	4,700 feet 7,550 feet 4,650 feet 5,050 feet
PORTLAND, OR PORTLAND-HILLSBORO (HIO)	12	02-20	4,922 feet
SALEM, OR MCNARY FIELD (SLE)	31 34	16-34 13-31	3,150 feet 3,050 feet
SPOKANE, WA SPOKANE INTL (GEG)	07 21 25	03-21 07-25 03-21	2,800 feet 7,000 feet 4,350 feet
TWIN FALLS, ID JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)	07 25	12-30 12-30	4,500 feet 3,600 feet

21 OCT 2010 to 18 NOV 2010

21 OCT 2010 to 18 NOV 2010

## RIDDLE HILL VISUAL RWY 7

AL-403 (FAA)

SPOKANE INTL (GEG)

SPOKANE, WASHINGTON

ATIS

124.325 254.375

SPOKANE APP CON

123.75 282.25 (WEST)

133.35 263.0 (EAST)

SPOKANE TOWER

118.3 278.3

GND CON

121.9 348.6

CLNC DEL

127.55

HWY 2

AVOID  
OVERFLYING  
THIS AREAFAIRCHILD  
AFB

BUNKERS

AIRWAY  
HEIGHTSSMOKE  
STACK

R-360

12

25

3

1-90

SPOKANE

115.5 GEG

Chan 102

Vertical Guidance Navaid and  
Angle: VASI 3.2° Angle.

RADAR REQUIRED

Weather minimums: Ceiling 1500 feet.  
Visibility 7 miles.

1 NM

2

3

4

5

6

7

8

9

RIDDLE HILL VISUAL APPROACH RWY 7

PROCEDURE NOT AUTHORIZED AT NIGHT.

RIDDLE HILL VISUAL RWY 7

47°37'N - 117°32'W

SPOKANE, WASHINGTON

SPOKANE INTL (GEG)

APP CRS <b>027°</b>	Rwy Idg TDZE Apt Elev	<b>11002</b> <b>2371</b> <b>2376</b>
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# RNAV (GPS) RWY 3

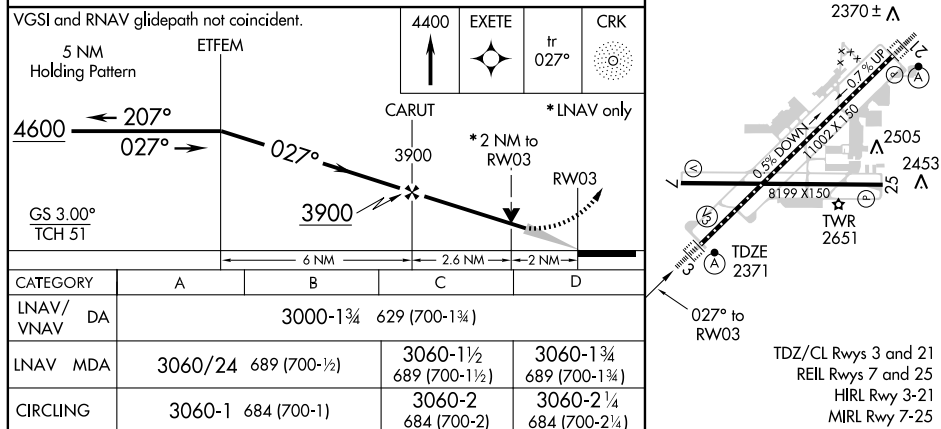
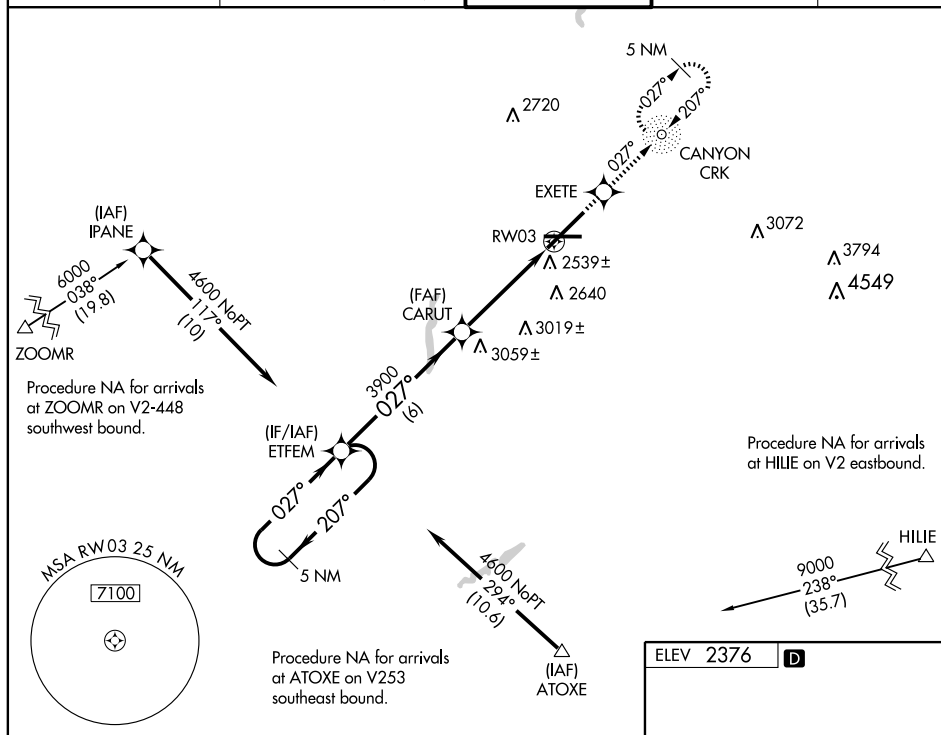
## SPOKANE INTL (GEG)

**▼** DME/DME RNP-0.3 NA.  
**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F).

ALS-F-2  


MISSED APPROACH: Climb to 4400 direct EXETE and on track 027° to CRK NDB and hold.

ATIS <b>124.325 254.375</b>	SPOKANE APP CON <b>123.75 282.25 (WEST)</b> <b>133.35 263.0 (EAST)</b>	SPOKANE TOWER <b>118.3 278.3</b>	GND CON <b>121.9 348.6</b>	CLNC DEL <b>127.55</b>
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SPOKANE, WASHINGTON

Amdt 1 03JUN10

47°37'N-117°32'W

SPOKANE INTL (GEG)

RNAV (GPS) RWY 3

NW-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH <b>48801</b> <b>W07A</b>	APP CRS <b>072°</b>	Rwy Idg TDZE Apt Elev	<b>8199</b> <b>2376</b> <b>2376</b>
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# RNAV (GPS) RWY 7

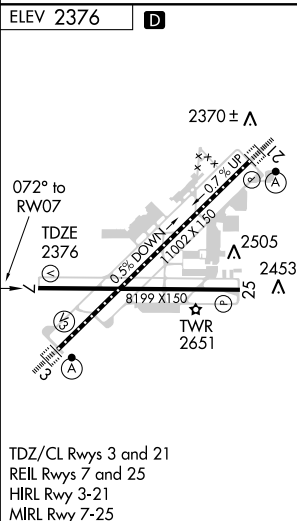
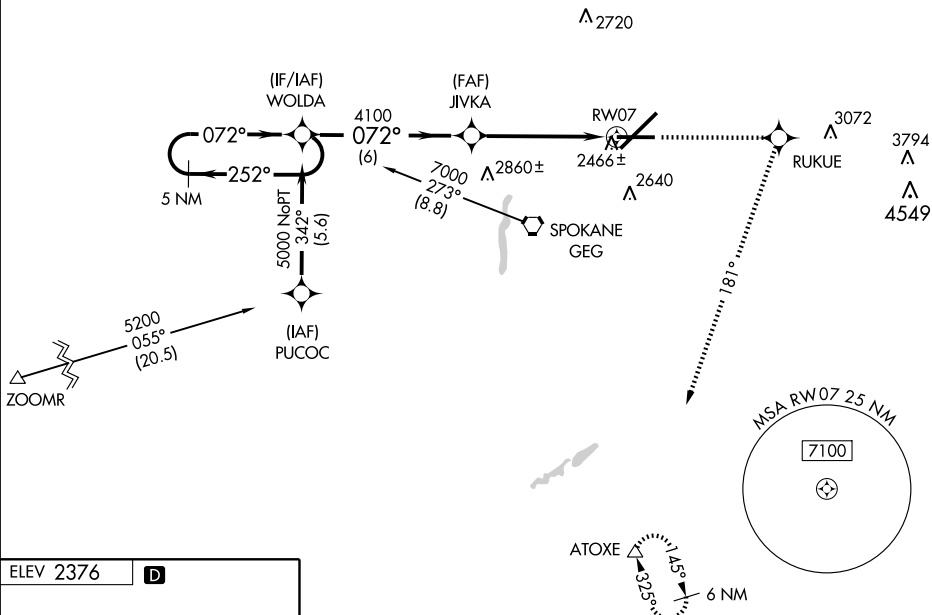
SPOKANE INTL (GEG)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F).  
DME/DME RNP-0.3 NA.  
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 6000 direct RUKUE and via 181° track to ATOXE and hold, continue climb-in-hold to 6000.

ATIS <b>124.325 254.375</b>	SPOKANE APP CON <b>123.75 282.25 (WEST)</b> <b>133.35 263.0 (EAST)</b>	SPOKANE TOWER <b>118.3 278.3</b>	GND CON <b>121.9 348.6</b>	CLNC DEL <b>127.55</b>
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Procedure NA for arrivals at GEG VORTAC via V120 northbound.

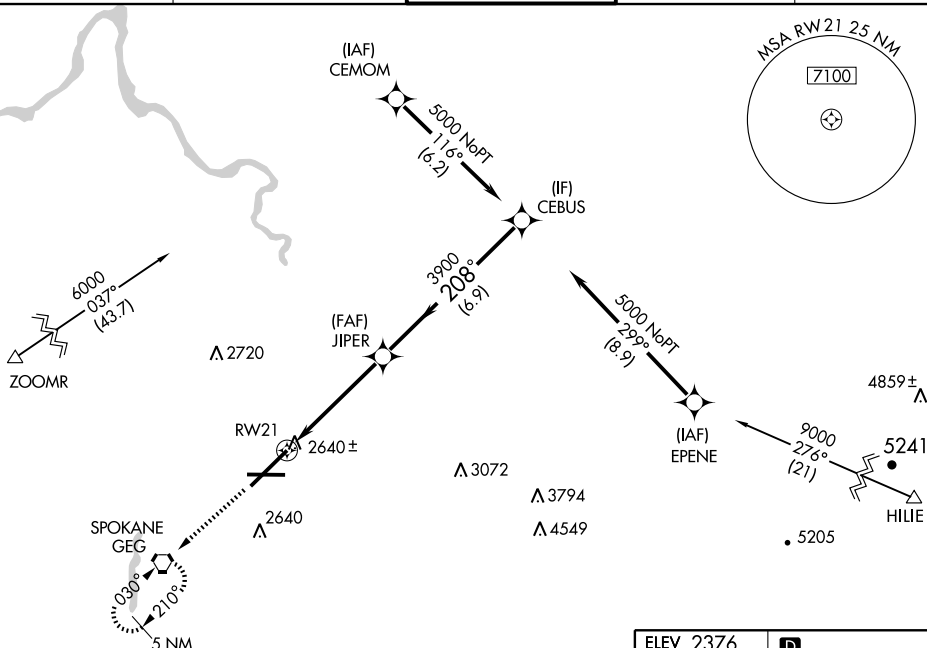


TDZ/CL Rwy 3 and 21  
REIL Rwy 7 and 25  
HIRL Rwy 3-21  
MIRL Rwy 7-25

5 NM Holding Pattern		WOLDA		6000 ↑	RUKUE ✧	181° tr	ATOXE △
5000 ← 252° 072° →		072°		JVKA ✕	* 1.1 NM to RW07		* LNAV only
GS 3.00° TCH 60		4100		RW07		↓	
		6 NM		4.1 NM		1.1	
CATEGORY	A	B	C	D			
LPV DA	2626-1 250 (300-1)						
LNAV/VNAV DA	2786-1½ 410 (500-1½)						
LNAV MDA	2800-1	424 (500-1)	2800-1¼		424 (500-1¼)		
CIRCLING	2960-1	584 (600-1)	2960-1½ 584 (600-1½)		2980-2 604 (700-2)		

APP CRS  
**208°**Rwy Idg **11002**  
TDZE **2346**  
Apt Elev **2376****RNAV (GPS) RWY 21**  
SPOKANE INTL (GEG)For uncompensated Baro-VNAV systems, LNAV/VNAV  
NA below -19°C (-2°F) or above 44°C (111°F).  
DME/DME RNP-0.3 NA.

ALSF-2

MISSED APPROACH: Climb to 4200 direct  
GEG VORTAC and hold.ATIS  
**124.325 254.375**SPOKANE APP CON  
**123.75 282.25 (WEST)**  
**133.35 263.0 (EAST)**SPOKANE TOWER  
**118.3 278.3**GND CON  
**121.9 348.6**CLNC DEL  
**127.55**

4200

GEG

VGSI and RNAV glidepath not coincident.

CEBUS

Procedure  
Turn  
NA

\*LNAV only

\* 1.4 NM to  
RWY21

JIPER

208°  
3900  
5000GS 3.00°  
TCH 50

CATEGORY

A

B

C

D

GLS PA DA

NA

LNAV/ VNAV

2720/50 374 (400-1)

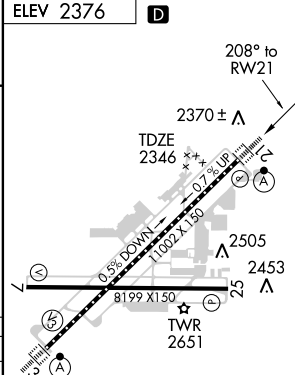
2720/50  
374 (400-1)

LNAV MDA

2800/24 454 (500-½)

2800/40  
454 (500-¾)2800/50  
454 (500-1)

CIRCLING

2960-1  
584 (600-1)2960-1  
584 (600-1)2960-1½  
584 (600-1½)2980-2  
604 (700-2)TDZ/CL Rwy 3 and 21  
REIL Rwy 7 and 25  
HIRL Rwy 3-21  
MIRL Rwy 7-25

WAAS CH <b>93501</b> <b>W25A</b>	APP CRS <b>253°</b>	Rwy Idg TDZE Apt Elev	<b>8199</b> <b>2372</b> <b>2376</b>
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# RNAV (GPS) RWY 25

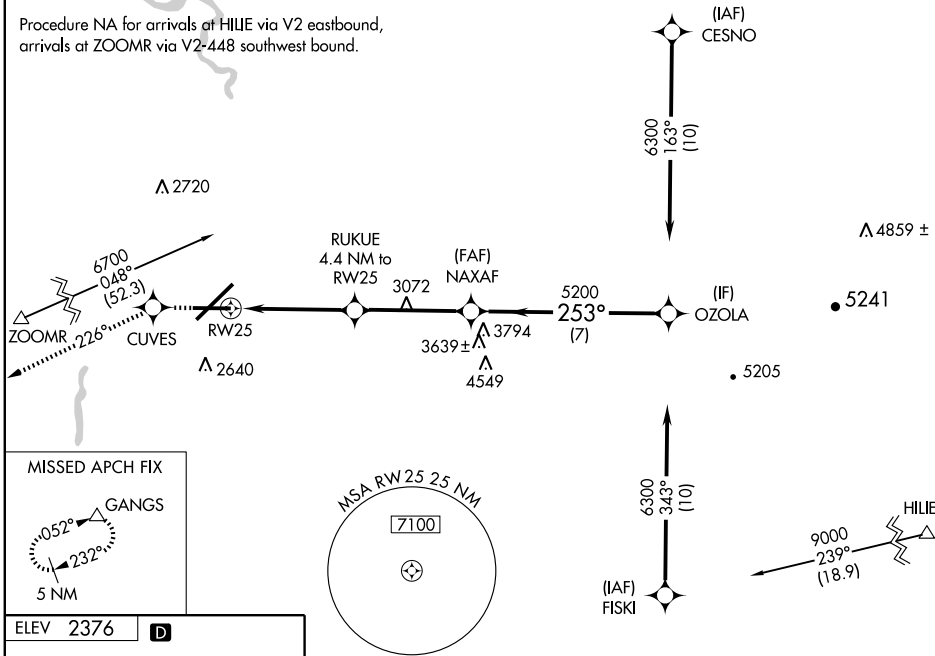
SPOKANE INTL (GEG)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F).  
DME/DME RNP-0.3 NA.  
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 5000 direct CUVES and via 226° track to GANGS and hold.

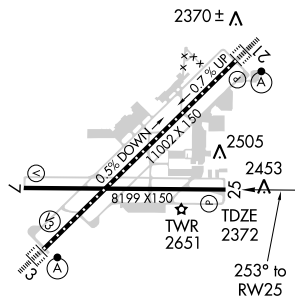
ATIS <b>124.325 254.375</b>	SPOKANE APP CON <b>123.75 282.25 (WEST)</b> <b>133.35 263.0 (EAST)</b>	SPOKANE TOWER <b>118.3 278.3</b>	GND CON <b>121.9 348.6</b>	CLNC DEL <b>127.55</b>
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Procedure NA for arrivals at HIIE via V2 eastbound, arrivals at ZOOMR via V2-448 southwest bound.

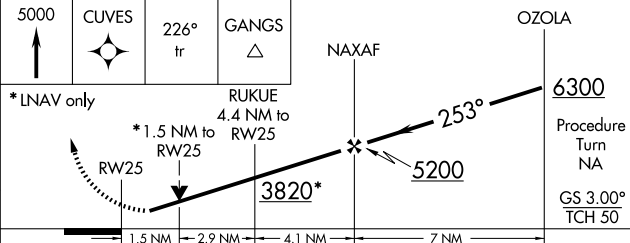


ELEV 2376

D



TDZ/CL Rwy 3 and 21  
REIL Rwy 7 and 25  
HIRL Rwy 3-21  
MIRL Rwy 7-25

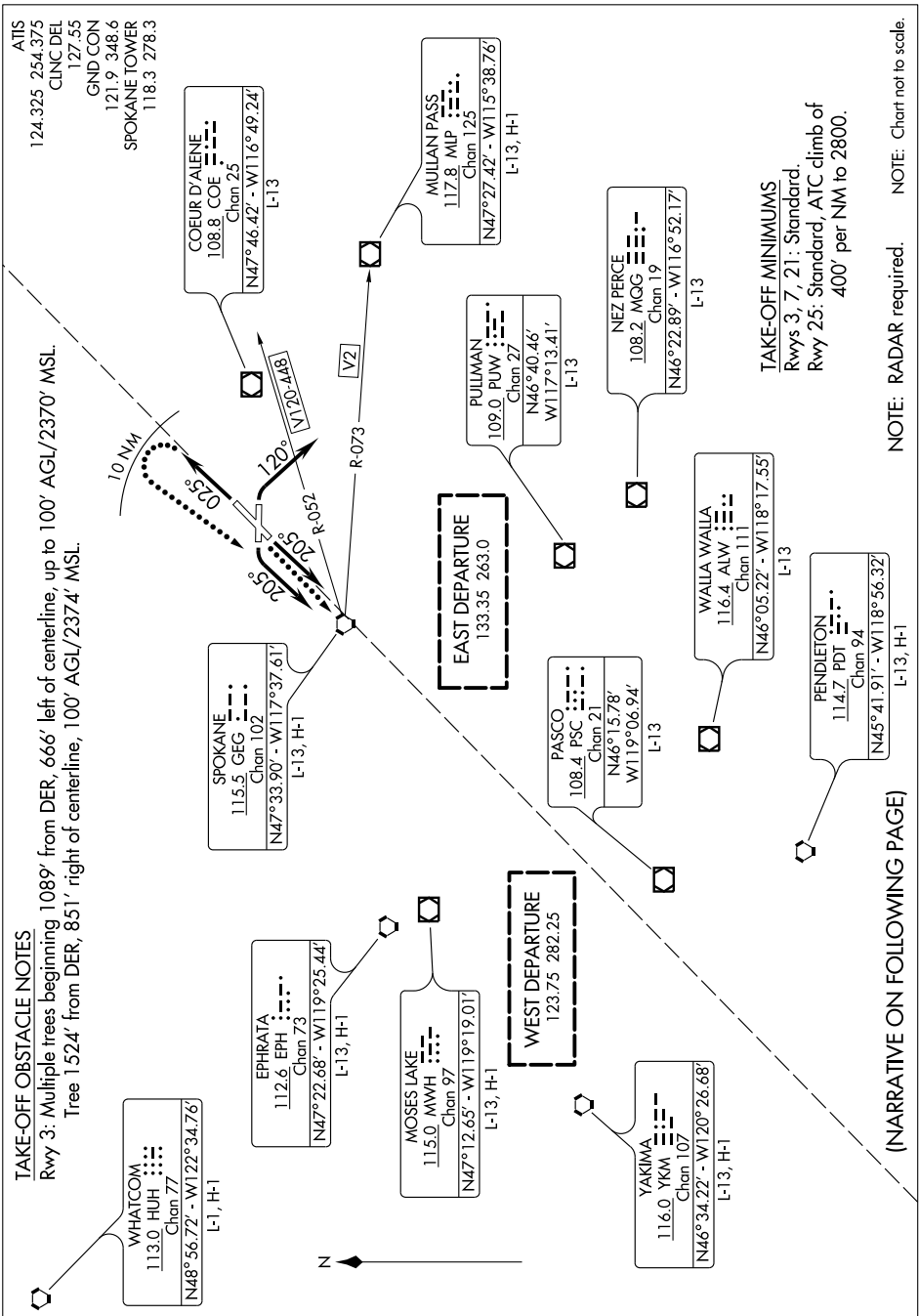


CATEGORY	A	B	C	D
LPV DA	2704-1¼	332 (400-1¼)		
LNAV/VNAV DA	2782-1½	410 (500-1½)		
LNAV MDA	2900-1 528 (600-1)	2900-1½ 528 (600-1½)	2900-1¾ 528 (600-1¾)	2980-2 604 (700-2)
CIRCLING	2960-1 584 (600-1)			

# SPOKANE ONE DEPARTURE

SL-403 (FAA)

SPOKANE INTL (GEG)  
SPOKANE, WASHINGTON



# SPOKANE ONE DEPARTURE

SPOKANE, WASHINGTON  
SPOKANE INTL (GEG)

(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required.

NOTE: Chart not to scale.

NW-1, 21 OCT 2010 to 18 NOV 2010



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Turn left heading 025°, expect radar vectors to assigned airway/route. Thence....

TAKE-OFF RUNWAY 7: Turn right heading 120°, expect radar vectors to assigned airway/route. Thence....

TAKE-OFF RUNWAY 21: Turn left heading 205°, expect radar vectors to assigned airway/route. Thence....

TAKE-OFF RUNWAY 25: Turn left heading 205°, expect radar vectors to assigned airway/route. Thence....

....maintain 12000' or assigned lower altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS: Climb direct GEG VORTAC before proceeding on course. Cross GEG VORTAC at or above: NE-bound V120-448 5200'; E-bound V2 5200'. Aircraft departing RWY 3, if not in contact with ATC within 10 NM after takeoff, turn left direct GEG VORTAC, cross GEG VORTAC at or above 5200', thence via assigned fix/route.

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010



VORTAC GEG <b>115.5</b> Chan <b>102</b>	APP CRS <b>028°</b>	Rwy Idg TDZE Apt Elev	<b>11002</b> <b>2371</b> <b>2376</b>
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# VOR RWY 3

SPOKANE INTL (GEG)

**V**  
**A** Circling southeast of Rwy 3-21 not authorized  
Category E.

ALSIF-2



MISSED APPROACH: Climbing left turn to 4200 direct to  
GEG VORTAC and hold.

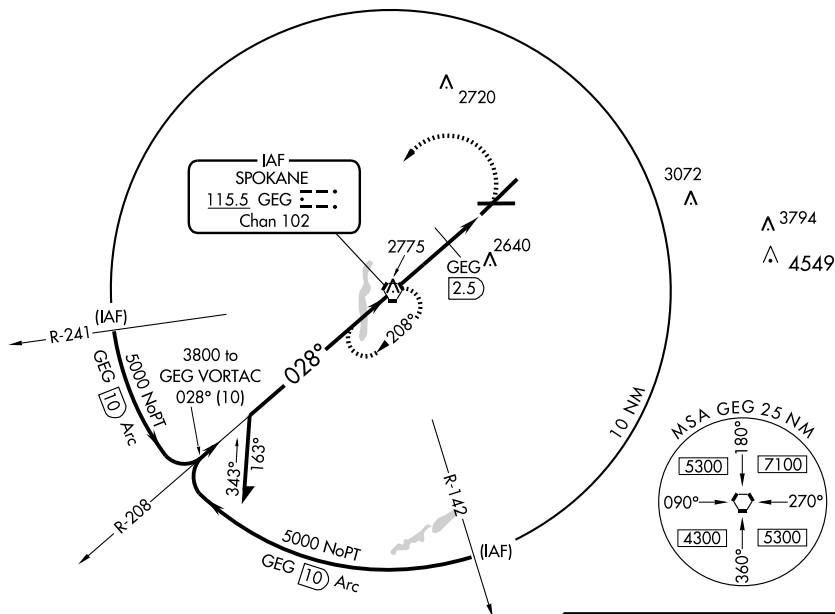
ATIS  
**124.325 254.375**

SPOKANE APP CON  
**123.75 282.25 (WEST)**  
**133.35 263.0 (EAST)**

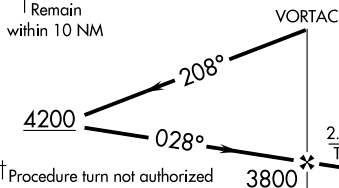
SPOKANE TOWER  
**118.3 278.3**

GND CON  
**121.9 348.6**

CLNC DEL  
**127.55**

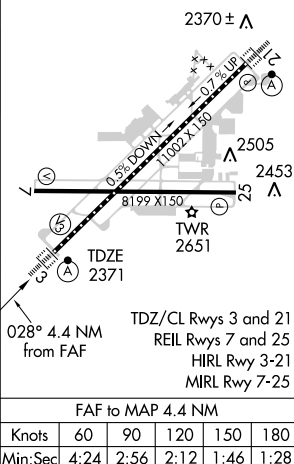


† Remain  
within 10 NM



CATEGORY	A	B	C	D	E
S-3	2960/24 589 (600-½)	2960/50 589 (600-1)	2960/60 589 (600-1¼)		
CIRCLING	2960-1 584 (600-1)	2960-1½ 584 (600-1½)	2960-2 584 (600-2)	3080-2½ 704 (800-2½)	
DME MINIMA					
S-3	2880/24 509 (600-½)	2880/50 509 (600-1)	2880/60 509 (600-1¼)		

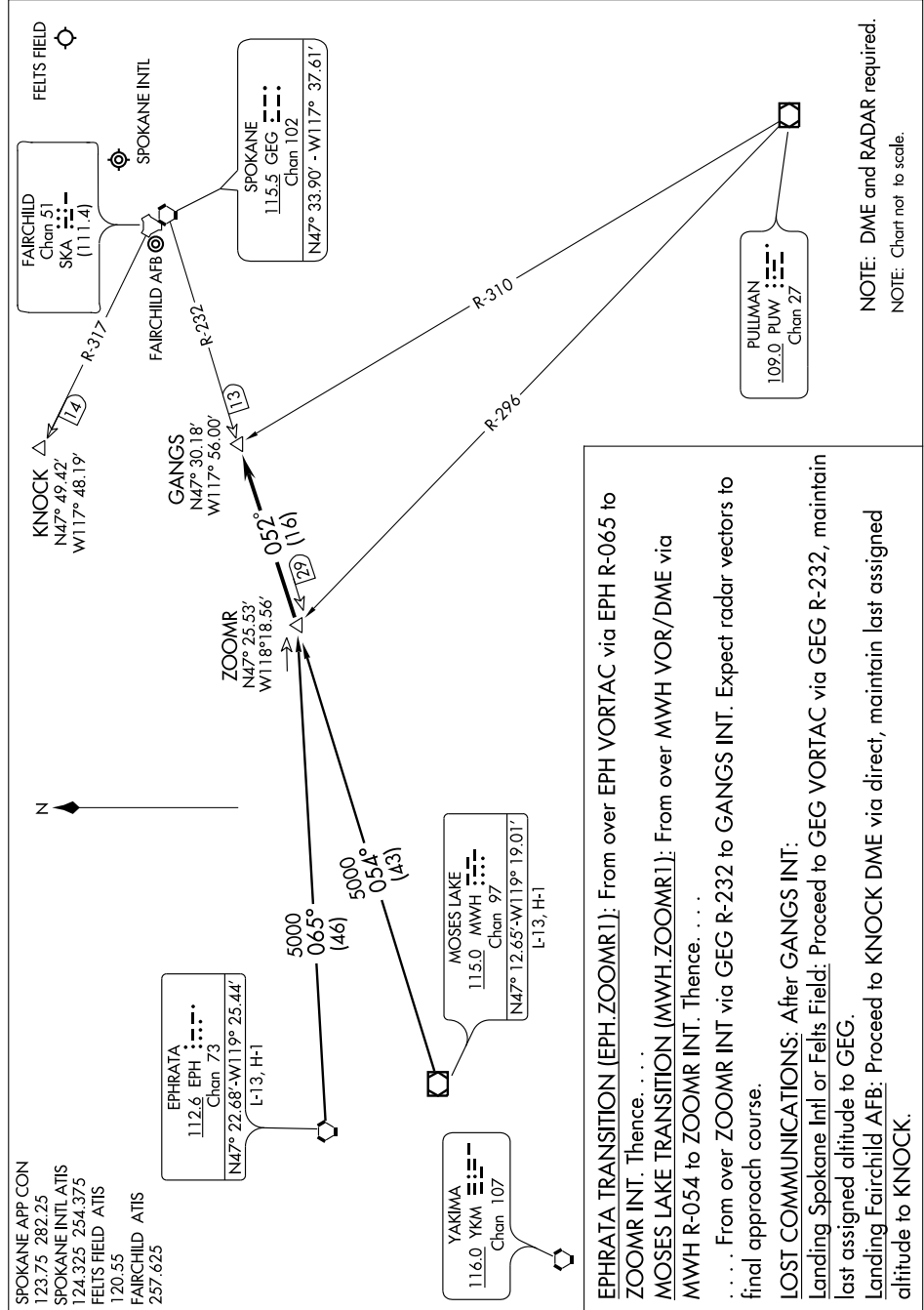
ELEV 2376

**D**

# ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON

NW-1, 21 OCT 2010 18:18



# ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON

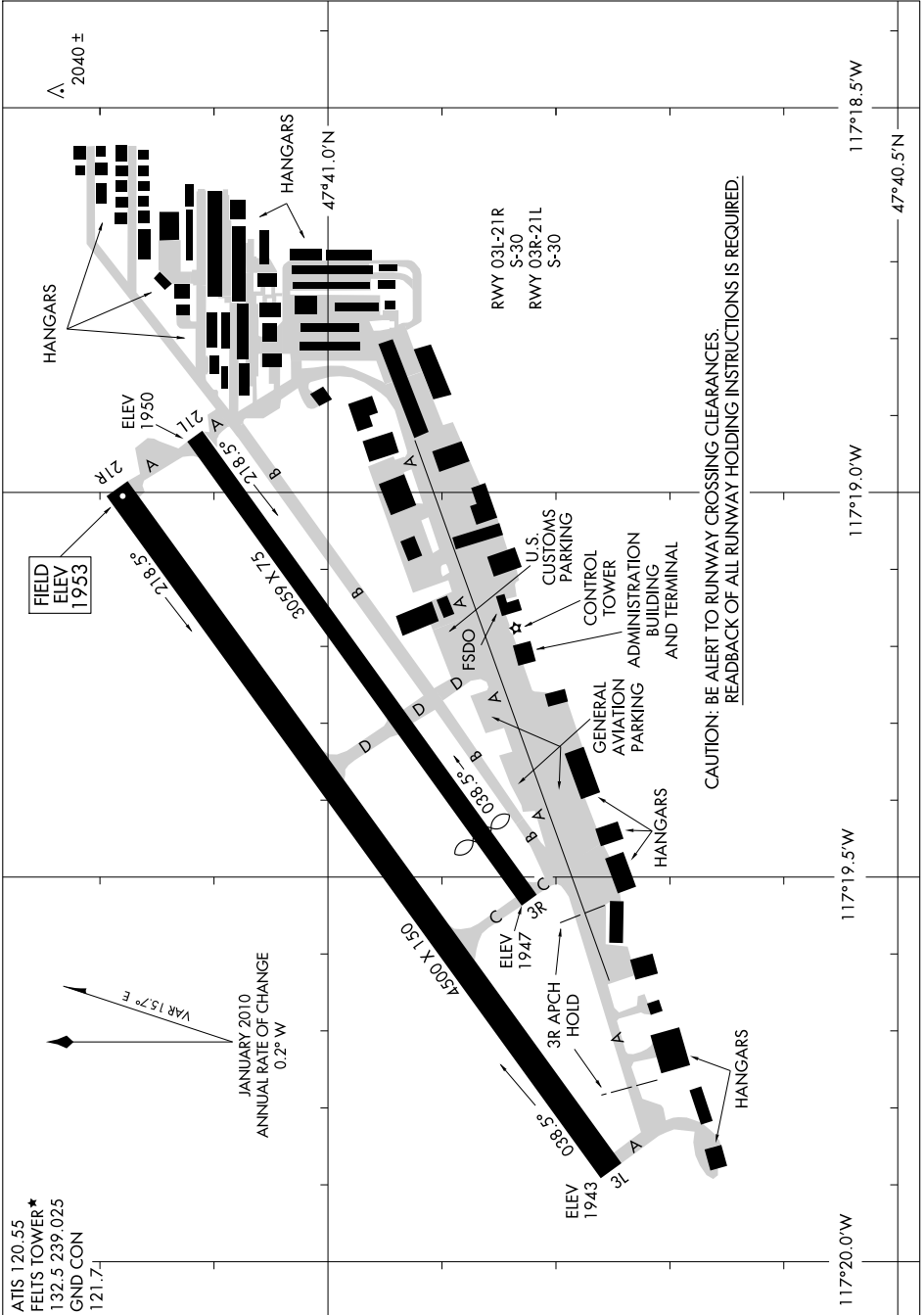
NW-1, 21 OCT 2010 to 18 NOV 2010

# AIRPORT DIAGRAM

AL-402 (FAA)

SPOKANE/ FELTS FIELD (SFF)  
SPOKANE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



NW-1, 21 OCT 2010 to 18 NOV 2010

# AIRPORT DIAGRAM

SPOKANE, WASHINGTON  
SPOKANE/ FELTS FIELD (SFF)

## SPOKANE

**FELTS FLD** (SFF) 4 NE UTC-8(-7DT) N47°40.97' W117°19.35'

1953 B S4 **FUEL** 100LL, JET A1 + OX 3, 4 LRA NOTAM FILE SFF

**RWY 03L-21R:** H4500X150 (CONC) S-30 MIRL

**RWY 03L:** REIL. VASI(V4L)—GA 3.0° TCH 50'. Road.

**RWY 21R:** MALSR. VASI(V4R)—GA 3.5° TCH 44'. Tree. Rgt tfc.

**RWY 03R-21L:** H3059X75 (ASPH) S-30

**RWY 03R:** Thld dspcd 415'. Bldg. Rgt tfc.

**RWY 21L:** PAPI(P4L)—GA 3.8° TCH 42'. Trees.

**AIRPORT REMARKS:** Attended 1500-0200Z†. Waterfowl and birds on and in/ov arpt. Lgt'd crane 1953' MSL (200' AGL) 1.25 NM east indef. Acft with tail heights over 20' must ctc ATCT prior to taxi. Twr unable to provide ATC svc on perimeter twy due to movement of uncontrolled ground tfc. PPR for rotorwing acft conducting hover ops above 10' AGL in non-movement area ctc twr. Obstacle free area for Twy A is delineated with a green line. Rwy 21L PAPI unusable byd 5° either side of centerline within 4 NM of thld. When twr clsd **ACTIVATE** MIRL Rwy 03L-21R, MALSR Rwy 21R and REIL 03L-CTAF. VASI Rwy 03L and VASI Rwy 21R opr continuously. PAPI Rwy 21L opr SR-SS. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** ASOS (509) 535-3290. **HIWAS**

**COMMUNICATIONS:** CTAF 132.5 ATIS 120.55 **UNICOM** 122.95

**SPOKANE RCO** 122.65 122.55 122.2 (SEATTLE RADIO)

® **SPOKANE APP/DEP CON** 133.35

**TOWER** 132.5 (1400-0400Z†) **GND CON** 121.7

**AIRSPACE:** CLASS D svc 1400-0400Z† other times CLASS E.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GEG.

**SPOKANE (H) VORTACW** 115.5 GEG Chan 102 N47°33.90' W117°37.61' 039° 14.2 NM to fld. 2756/21E. **HIWAS.**

**ILS/DME** 111.7 I-FLZ Chan 54 Rwy 21R. LOC only. Localizer unusable 0.2 NM from rwy threshold. DME unusable 15° right of course.

**COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.

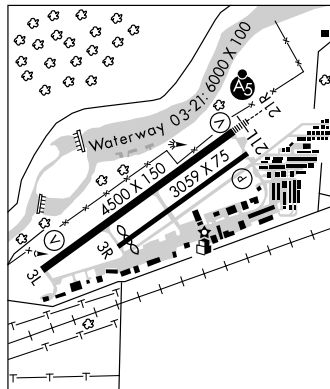
1910

**WATERWAY 03-21:** 6000X100 (WATER)

**WATERWAY 21:** Rgt tfc.

**SEAPLANE REMARKS:** Extensive boating in area of water rwy. Water level on river may be lowered by Corp of Engineers.

Water area adjacent to airport not controlled or maintained by airport. Waterway 03-21 water rwy advisory service only area not visible from twr. Ctc Felts twr 132.5 for tfc data.

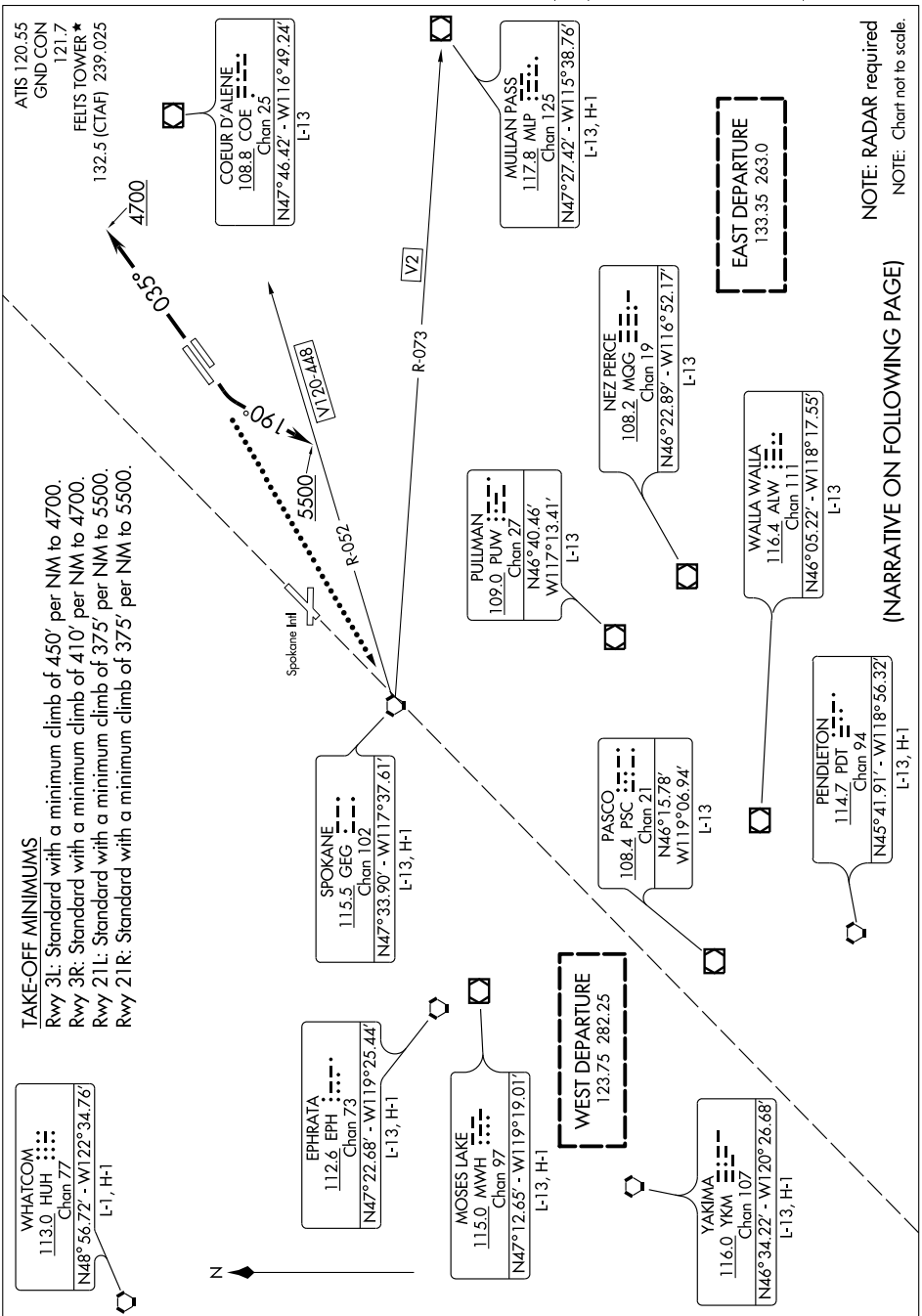


# FELTS TWO DEPARTURE

SL-402 (FAA)

SPOKANE/FELTS FIELD (SFF)  
SPOKANE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



# FELTS TWO DEPARTURE

SPOKANE, WASHINGTON  
SPOKANE/FELTS FIELD (SFF)

NW-1, 21 OCT 2010 to 18 NOV 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3L/R: Climb heading 035° to 4700, expect RADAR vectors to assigned airway/route. Thence....  
TAKE-OFF RUNWAY 21L/R: Climbing left turn heading 190° to 5500, expect RADAR vectors to assigned airway/route. Thence....

.....maintain 12000' or assigned lower altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS: Climb direct GEG VORTAC before proceeding on course. Cross GEG VORTAC at or above: NE-bound V120-448 and E-bound V2 5200'.

TAKE-OFF OBSTACLE NOTES

- Rwy 3L: Trees beginning 1853' from DER, 772' right of centerline, up to 100' AGL/2037' MSL.  
Trees beginning 3538' from DER, 529' left of centerline, up to 100' AGL/2339' MSL.  
Antenna, trees and transmission poles beginning 1.5 NM from DER, 16' left of centerline, up to 100' AGL/2579' MSL.  
Trees beginning 2.3 NM from DER, 723' right of centerline, up to 100' AGL/2499' MSL.
- Rwy 3R: Hangar, NDB, and trees beginning 92' from DER, 269' right of centerline, up to 100' AGL/2040' MSL.  
Trees beginning 4685' from DER, 1033' left of centerline, up to 100' AGL/2339' MSL.  
Antenna, trees and transmission poles beginning 1.6 NM from DER, 525' left of centerline, up to 100' AGL/2559' MSL.  
Trees and transmission poles beginning 2.6 NM from DER, 214' right of centerline, up to 150' AGL/2570' MSL.
- Rwy 21L: Elevator, pole on building and trees beginning 315' from DER, 302' left of centerline, up to 140' AGL/2080 MSL.
- Rwy 21R: Poles and trees beginning 188' from DER, 13' right of centerline, up to 100' AGL/1982' MSL.  
Elevator, pole hangar and building beginning 203' from DER, 1' left of centerline, up to 140' AGL/2080' MSL.  
Terrain and trees beginning 3.1 NM from DER, 4904' left of centerline, up to 100' AGL/2559' MSL.

NW-1, 21 OCT 2010 to 18 NOV 2010

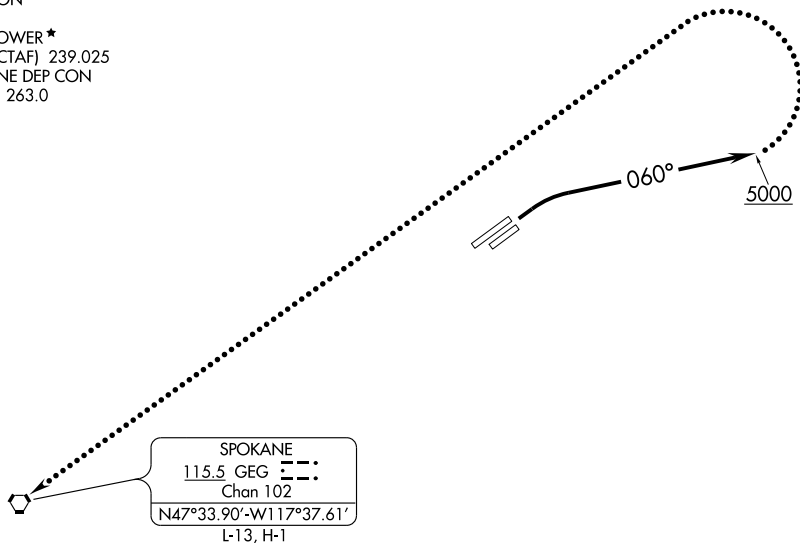
NW-1, 21 OCT 2010 to 18 NOV 2010

## HAYDEN TWO DEPARTURE

SL-402 (FAA)

SPOKANE/FELTS FIELD (SFF)  
SPOKANE, WASHINGTON

ATIS 120.55  
GND CON  
121.7  
FELTS TOWER ★  
132.5 (CTAF) 239.025  
SPOKANE DEP CON  
133.35 263.0



NOTE: RADAR required.

#### TAKE-OFF MINIMUMS

Rwy 21L/21R: NA- ATC.

Rwy 3L/3R: Standard with minimum climb of 410' per NM to 5000.

#### TAKE-OFF OBSTACLE NOTES

Rwy 3L: Trees beginning 1853' from DER, 772' right of centerline, up to 100' AGL/2037' MSL.

Trees beginning 3538' from DER, 529' left of centerline, up to 100' AGL/2339' MSL.

Antenna, trees and transmission poles beginning 1.5 NM from DER, 16' left of centerline, up to 100' AGL/2579' MSL.

Trees beginning 2.3 NM from DER, 723' right of centerline, up to 100' AGL/2499' MSL.

Rwy 3R: Hangar, NDB, and trees beginning 92' from DER, 269' right of centerline, up to 100' AGL/2040' MSL.

Trees beginning 4685' from DER, 1033' left of centerline, up to 100' AGL/2339' MSL.

Antenna, trees and transmission poles beginning 1.6 NM from DER, 525' left of centerline, up to 100' AGL/2559' MSL.

Trees and transmission poles beginning 2.6 NM from DER, 214' right of centerline, up to 150' AGL/2570' MSL.

NOTE: Chart not to scale.

#### DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 3L/R: Climbing right turn heading 060° to 5000'.

Expect RADAR vectors to (assigned route) or (fix).

LOST COMMUNICATIONS: If not in radio contact with departure control after leaving 3000', continue climb to 5000', then turn left, proceed direct to GEG VORTAC and thence proceed on course.

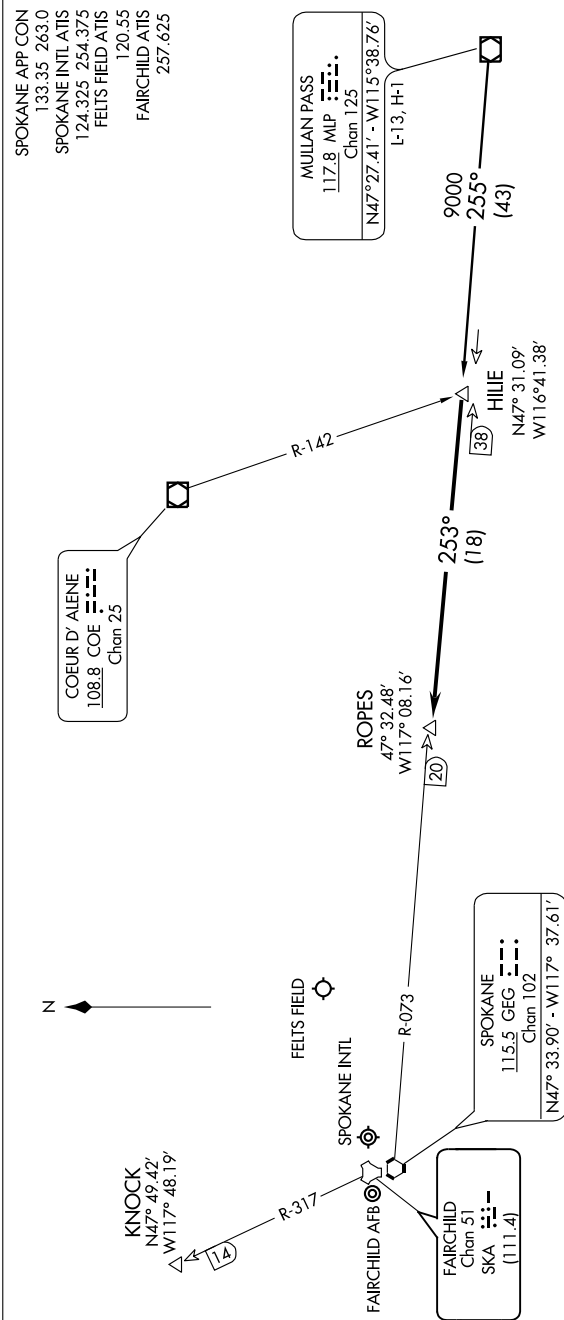
## HAYDEN TWO DEPARTURE

## HILIE ONE ARRIVAL (HILIE.HILIE1)

ST-403 (FAA)

SPOKANE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



NOTE: DME and RADAR required.  
NOTE: Chart not to scale.

MULAN PASS TRANSITION (MLP.HILIE1): From over MLP VOR/DME via MLP R-255 to HILIE INT. Thence. . . .

. . . . From over HILIE INT via GEG R-073 to ROPES INT. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: After ROPES INT:

Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-073, maintain last assigned altitude to GEG.

Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

## HILIE ONE ARRIVAL (HILIE.HILIE1)

SPOKANE, WASHINGTON



LOC/DME I-FLZ  
**111.7**  
Chan **54**

APP CRS  
**218°**

Rwy ldg  
TDZE  
Apt Elev  
**4500**  
**1953**  
**1953**

# ILS/DME RWY 21R

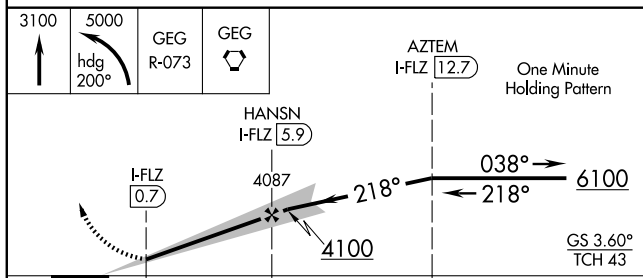
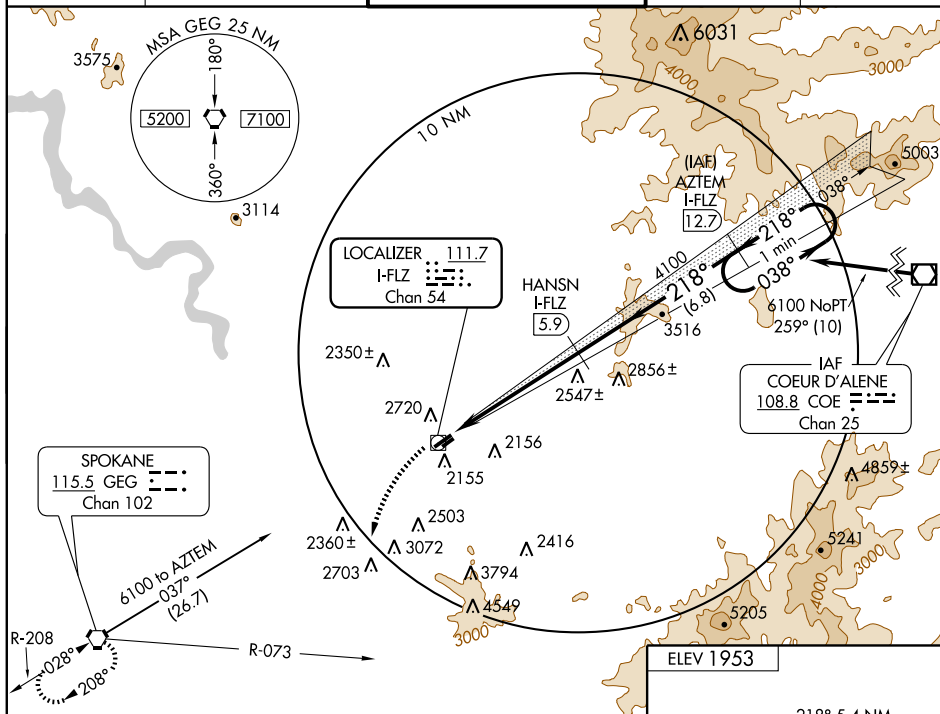
SPOKANE / FELTS FIELD (SFF)

**V** Circling not authorized northwest of Rwy 3L-21R.  
**A** Inoperative table does not apply.

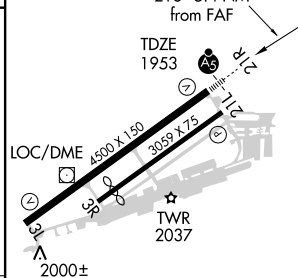


MISSED APPROACH: Climb to 3100 then climbing left turn to 5000 via heading 200° and GEG R-073 to GEG VORTAC and hold.

ATIS	SPOKANE APP CON	FELTS TOWER ★	GND CON	UNICOM
<b>120.55</b>	<b>133.35 263.0</b>	<b>132.5 (CTAF) 239.025</b>	<b>121.7</b>	<b>122.95</b>



CATEGORY	A	B	C	D
S-ILS 21R	2223-3/4 270 (300-3/4)			NA
S-LOC 21R	2860-1 1/4 907 (1000-1 1/4)	2860-2 3/4 907 (1000-2 3/4)		NA
CIRCLING	2860-1 1/4 907 (1000-1 1/4)	2860-2 3/4 907 (1000-2 3/4)		NA



REIL Rwy 3L  
MIRL Rwy 3L-21R

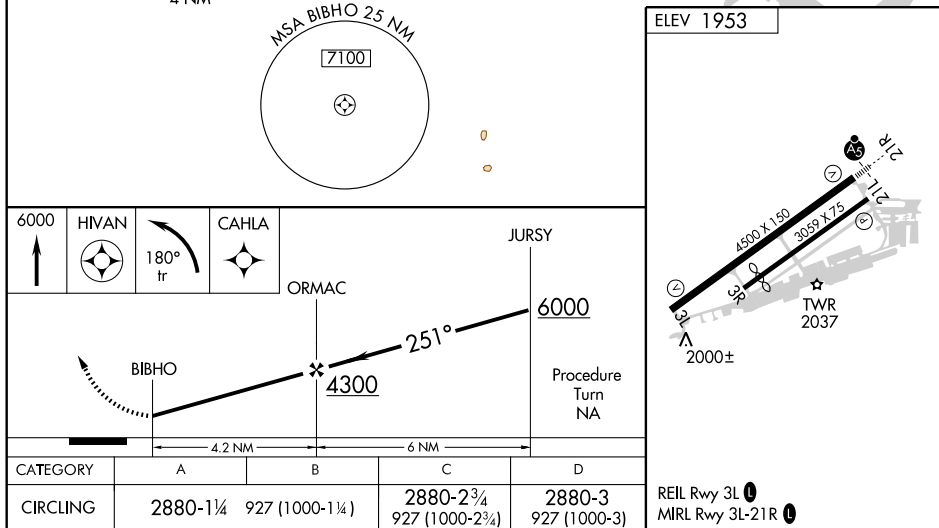
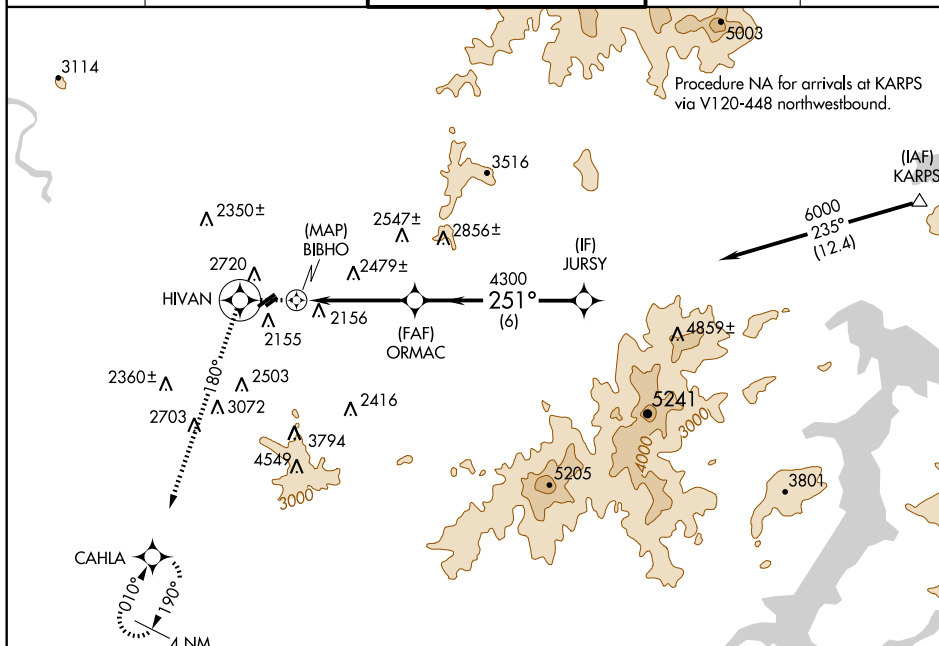
APP CRS <b>251°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>1953</b>
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# RNAV (GPS)-A

SPOKANE / FELTS FIELD (SFF')

<p><b>▼</b> DME/DME RNP- 0.3 NA.</p> <p><b>▲</b> Circling NA northwest of Rwy 3L-21R.</p>	<p>MISSED APPROACH: Climb to 6000 direct HIVAN and left turn via 180° track to CAHLA and hold.</p>
---	--

<p>ATIS <b>120.55</b></p>	<p>SPOKANE APP CON <b>133.35 263.0</b></p>	<p>FELTS TOWER ★ <b>132.5 (CTAF) 239.025</b></p>	<p>GND CON <b>121.7</b></p>	<p>UNICOM <b>122.95</b></p>
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## RNAV (GPS) RWY 3L

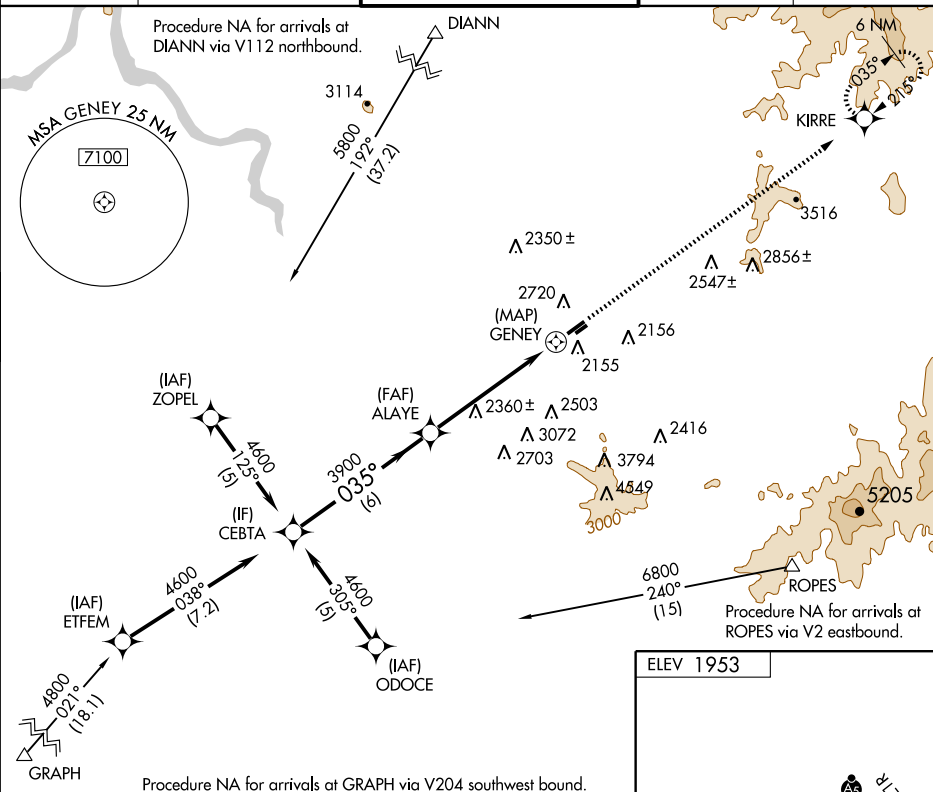
SPOKANE / FELTS FIELD (SFF)

APP CRS	<b>035°</b>
Rwy Idg	<b>4500</b>
TDZE	<b>1945</b>
Apt Elev	<b>1953</b>

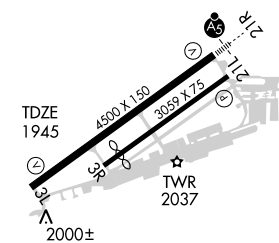
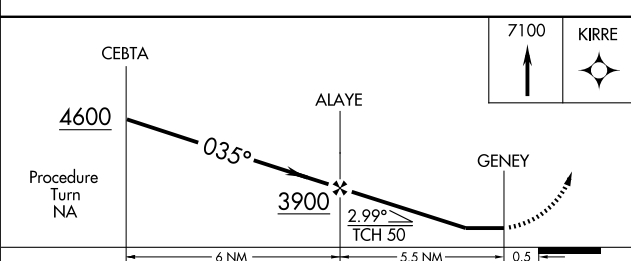
- Circling NA northwest of Rwy 3L-21R.  
 Circling NA at night to Rwy 3R-21L.  
 DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 7100 direct KIRRE and hold.

ATIS <b>120.55</b>	SPOKANE APP CON <b>133.35 263.0</b>	FELTS TOWER ★ <b>132.5 (CTAF) 239.025</b>	GND CON <b>121.7</b>	UNICOM <b>122.95</b>
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ELEV 1953



CATEGORY	A	B	C	D
LNAV MDA	2880-1¼ 935 (1000-1¼)	2880-2¾ 935 (1000-2¾)	2880-3 935 (1000-3)	2880-3 935 (1000-3)
CIRCLING	2880-1¼ 927 (1000-1¼)	2880-2¾ 927 (1000-2¾)	2880-3 927 (1000-3)	2880-3 927 (1000-3)

 REIL Rwy 3L   
 MRL Rwy 3L-21R

VORTAC GEG <b>115.5</b> Chan <b>102</b>	APP CRS <b>039°</b>	Rwy ldg TDZE Apt Elev <b>4500</b> <b>1945</b> <b>1953</b>
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# VOR RWY 3L

SPOKANE / FELTS FIELD (SFF)

- ▼** Girdling NA northwest of Rwy 3L-21R.  
**▲** Visibility reduction by helicopters NA.  
 ADF or DME required.  
 When local altimeter setting not received, use Spokane altimeter setting and increase all MDA 100 feet.

MISSED APPROACH: Climbing left turn to 4500 direct GEG VORTAC and hold.

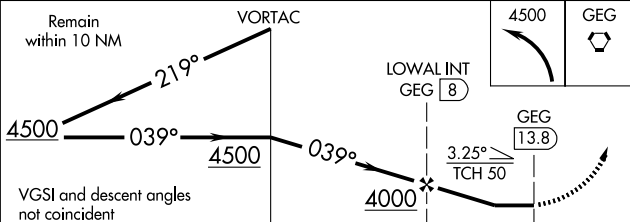
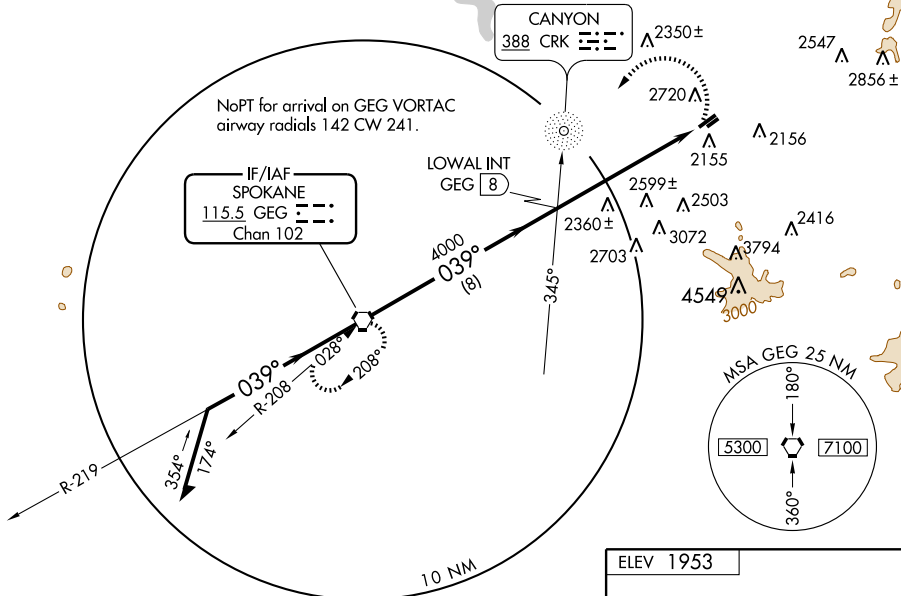
ATIS  
**120.55**

SPOKANE APP CON  
**133.35 263.0**

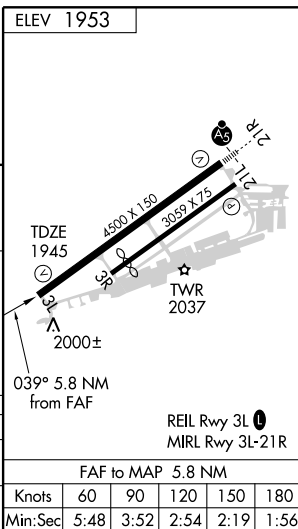
FELTS TOWER ★  
**132.5 (CTAF) 239.025**

GND CON  
**121.7**

UNICOM  
**122.95**

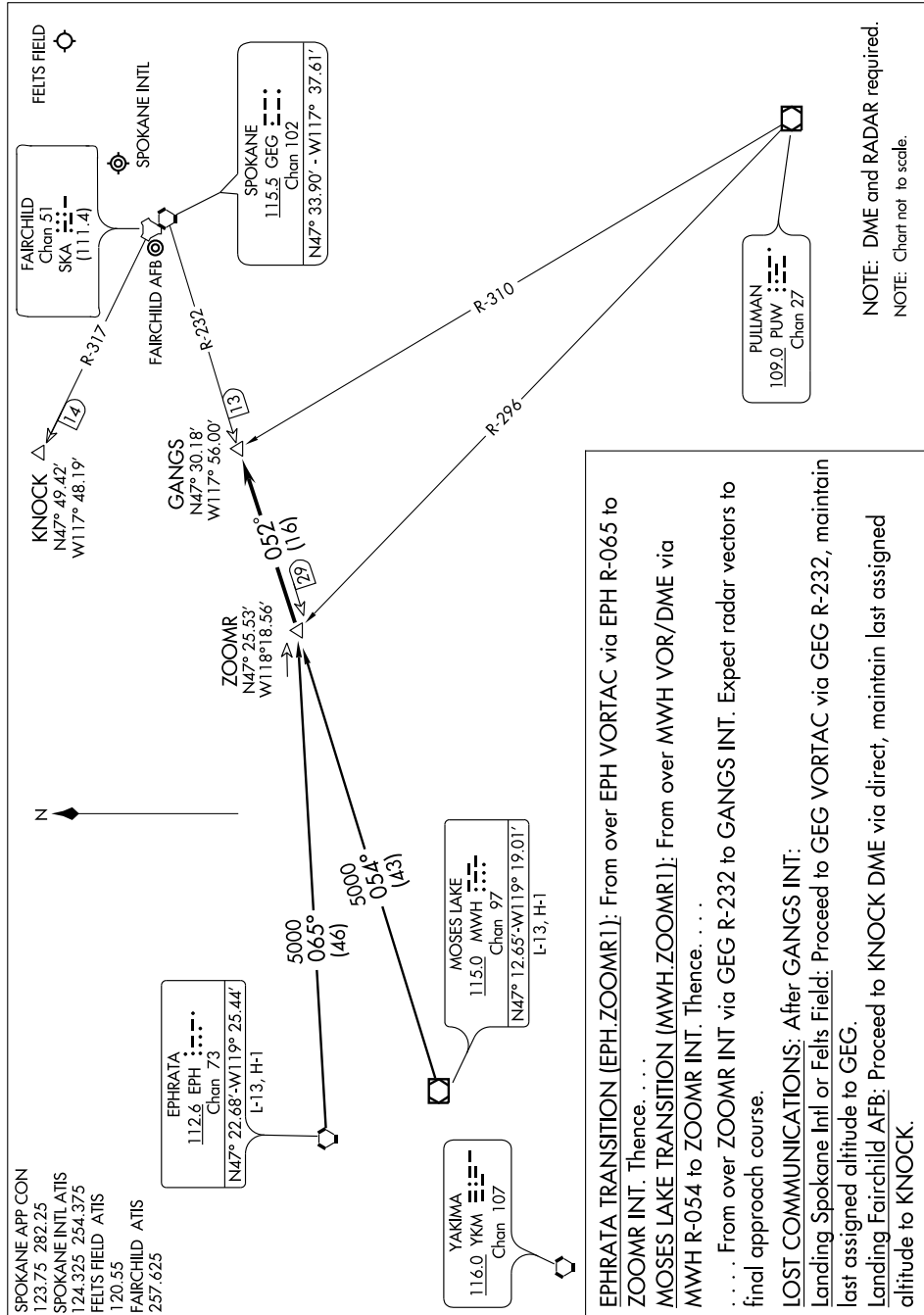


CATEGORY	A	B	C	D
S-3L	2920-1¼ 975 (1000-1¼)	2920-1½ 975 (1000-1½)	2920-3	975 (1000-3)
CIRCLING	2920-1¼ 967 (1000-1¼)	2920-1½ 967 (1000-1½)	2920-3	967 (1000-3)



Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

NW-1, 21 OCT 2010 18:18



## AIRPORT DIAGRAM

AFD-553 [USAF]

SPOKANE, WASHINGTON

ATIS 257.625  
 FAIRCHILD TOWER  
 120.35 233.7  
 GND CON  
 123.6 275.8

JULY 2010  
 ANNUAL RATE OF CHANGE  
 0.2° W

VAR 15.7° E

HOT CARGO

117°38'W

117°39'W

117°40'W

117°41'W

47°38'N

47°37'N

Λ  
 2550

ELEV  
 2430

WATER  
 TOWER  
 2608

BASE OPS  
 FIRE  
 STATION

ELEV  
 2435

ELEV  
 2440

WEST  
 RAMP

WATER  
 TOWER  
 2568

WATER  
 TOWER  
 2560

CONTROL  
 TOWER  
 2537

13,899 × 200

ELEV  
 2450

Rwy 5-23  
 S155, T220, ST175, TT550

FIELD  
 ELEV  
 2461

1000 ×  
 200

## AIRPORT DIAGRAM

SPOKANE, WASHINGTON  
 FAIRCHILD AFB (KSKA)

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

**FAIRCHILD AFB** (SKA)(KSKA) AF (ANG) 10 SW UTC-8(-7DT) N47°36.90' W117°39.35' SEATTLE  
 2461 B TPA—See Remarks AOE Class I, ARFF Index A NOTAM FILE SKA Not insp. H-1C, L-13B  
**RWY 05-23:** H13899X200 (CONC) PCN 51 R/B/W/T HIRL CL DIAP, AD  
**RWY 05:** ALSF1. TDZL. PAPI(P4L)—GA 3.0° TCH 51'. **RWY 23:** ALSF1. TDZL. PAPI(P4L)—GA 2.5° TCH 50'.  
 Rgt tfc.  
**MILITARY SERVICE:** LGT Rwy 05 PAPI not coincidental with ILS/GS. Apch lighting system Rwy 05-23 NSTD. JASU (MA-1A)  
 (A/M32A-86) (MC-1A) **FUEL J8** **FLUID SP** PRESAIR; De-ice Not avbl for C5, C17; LOX **OIL** O-148-156  
 JOAP **TRAN ALERT** Svc weekdays 1500-0700Z†, weekends 13,000 to 32,000  
 svc required. Fleet svc avbl. No potable water svc.  
**MILITARY REMARKS:** See FLIP AP/1 Supplementary Arpt Information. **RSTD** PPR includes scheduled AMC mission. 24 hr  
 prior coordination required. All inbound passenger/cargo acft must ctc Command Post no later than 30 min prior  
 to ldg. AMC acft opr rstd during Bird Watch Condition Moderate (tkf or ldg permission only when dep/arr route  
 avoid identified bird activity, no local IFR/VFR tfc pattern activity) and Severe (tkf and ldg prohibited without  
 Operation Group Commander approval, practice circling apch not authorized for tran acft) ctc twr, PTD, or  
 Command Post for current Bird Watch condition. Acft configured with explosives are not authorized. Cargo acft  
 transporting explosives are authorized. Arpt unable to support acft transporting more than 13,000 to 32,000  
 pounds class 1.1 explosive cargo. First 1300' Rwy 23/last 1300' Rwy 05 rated poor. Use Twy F int for Rwy 23  
 dep unless mission requires full length. To max extent possible exit Twy F when ldf Rwy 05. Avoid ldg on first  
 1300' of Rwy 23 unless wx dictates use of instrument apch. Dur taxi acft are to use idle thrust and limit the use  
 of reverse thrust when opr on first 1300' Rwy 23/last 1300' Rwy 05. Practice circling apch not authorized for  
 tran acft. Parachute jumping activity Fri 2030-2130Z†, Ellington Drop Zone, 5000' south of rwy. Parking spots  
 15-30 are tow on/off only, no engine runs. **CAUTION** Rwy edge lgts located 60' from outside of side stripe.  
 Uncontrolled vehicles on all twys and ramps. Helicopter opns within vicinity of Fairchild AFB. Departing acft  
 remain at or blo 3700' until dep end of rwy for protection of overhead pattern. Do not mistake Spokane Intl 4.5  
 NM east for Fairchild AFB. Phase II (the high bird potential haz time period) of the Bird Aircraft Safety Hazard  
 program is in effect annually from May to Oct. Rwy 05-23 overruns rated poor. **TFC PAT** TPA—Rectangular 3700  
 (1239), overhead 4200(1739) **CSTMS/AG/IMG** - C509-247-5435/5439. **MISC** Air Evac/Tran acft ctc PTD 20  
 minutes prior to arrival. Base OPS DSN 657-5439/5202, C509-247-5439/5202. **ANG** Opr Mon-Fri  
 1515-2345Z†, clsd weekend and holidays.  
**COMMUNICATIONS:** SFA ATIS 257.625 PTD 130.0 372.2  
**Ⓡ SPOKANE APP/DEP CON** 133.35 263.0 (026°-204°) 123.75 282.25 (205°-025°)  
**TOWER** 120.35 233.7 **GND CON** 123.6 275.8  
**COMD POST** (STRIKEHAWK) 311.0 321.0 **PMSV METRO** 234.8 Wx stn opr Mon-Thu 1300-1700Z†. Fri hrs vary  
 based on lcl flying, clsd weekend and hol. Full svc PMSV avbl via 25 OWS. AWOS in use. DSN 657-9010.  
 C509-247-9010. Tran aircrew may ctc 25 OWS DSN 228-6598, or C520-228-6598 for wx briefing. When  
 possible provide 2hr PN for all rqr briefings. **WASHINGTON ANG OPS** 293.7  
**AIRSPACE:** CLASS C svc ctc **APP CON**.  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE SKA.  
**(L) TACAN** SKA Chan 51 N47°36.64' W117°39.74' at fld. 2438/19E. No NOTAM MP Tue 1400-1700Z†  
 (2000/3+1).  
**TACAN** unusable:  
 110°-220° byd 20 NM blo 7,000' 220°250° byd 30 NM blo 5,500'  
 110°-220° byd 30 NM blo 9,500'  
**ILS 110.3** I-FRC Rwy 05. Back course unusable. No NOTAM MP Wed and Thu 1400-1700Z†  
 (2000/3+1).  
**ILS 110.3** I-SKA Rwy 23. Class IT. Back course unusable. No NOTAM MP Wed and Thu  
 1400-1700Z† (2000/3+1).  
**COMM/NAV/WEATHER REMARKS:** Acft rqr SFA notify Seattle Center or Spokane App Con 20 minutes out on any published  
 frequency.

**FELTS FLD** (See SPOKANE)

**FERRY CO** (See REPUBLIC)

**FIRSTAIR FLD** (See MONROE)

**FLOATHAVEN SPB** (See BELLINGHAM)

**FLY FOR FUN** (See VANCOUVER)

**FORKS** (S18) 1 SW UTC-8(-7DT) N47°56.26' W124°23.76'

SEATTLE

299 NOTAM FILE SEA

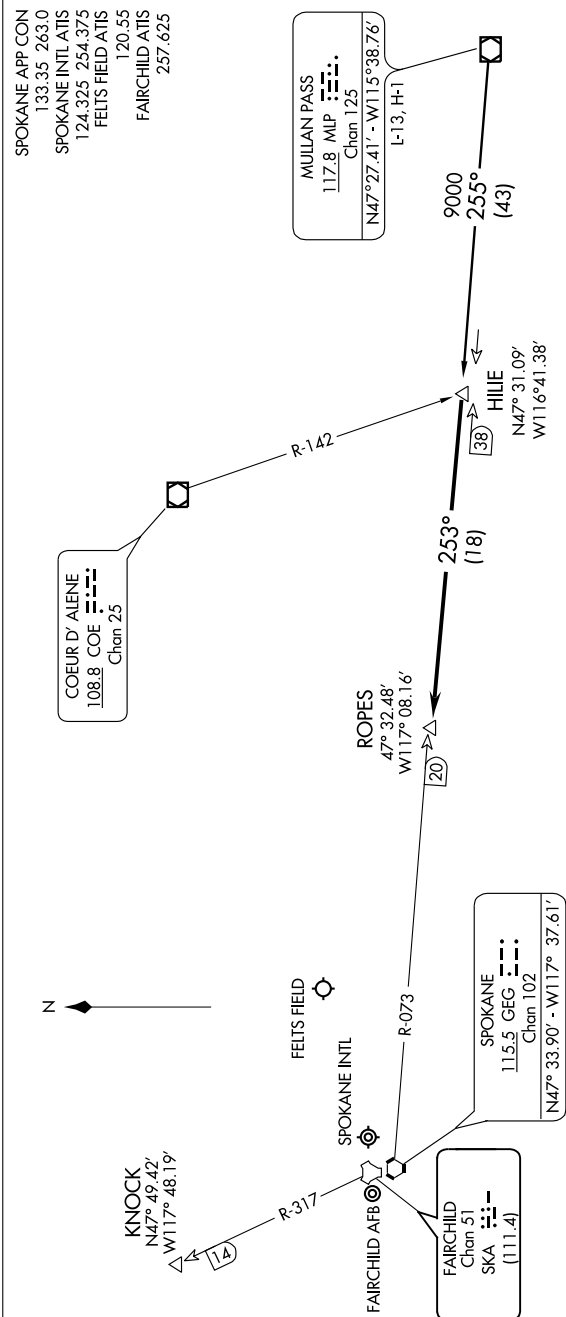
**RWY 04-22:** H2400X75 (ASPH) MIRL

**RWY 04:** REIL. Tree. **RWY 22:** REIL. Tree. Rgt tfc.

**AIRPORT REMARKS:** Unattended. Wildlife on and invof arpt.

**COMMUNICATIONS:** CTAF 122.9

NW-1, 21 OCT 2010 to 18 NOV 2010



NOTE: DME and RADAR required.

MULLAN PASS TRANSITION (MLP.HIUE1): From over MLP VOR/DME via MLP R-255 to HIUE INT. Thence. . . . .

LOST COMMUNICATIONS: After ROPES INT: Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-073, maintain last assigned altitude to GEG.  
Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

NW-1. 21 OCT 2010 to 18 NOV 2010

## HILIE ONE ARRIVAL (HILIE.HILIE1)

SPOKANE, WASHINGTON



Rwy Idg **13,899**  
 TDZE **2461**  
 Arpt Elev **2461**

 LOC I-FRC  
**110.3**

 APCH CRS  
**048°**

AL-553 [USAF]

ILS or LOC RWY 5

FAIRCHILD AFB (KSKA)

\* When ALS inop, increase vis to  $\frac{3}{4}$  mile, RVR to 40.  
 When TDZL/CL lights inop, increase CAT ABCD RVR to 24.  
 \*\*\* When ALS inop increase vis to 1 mile, RVR to 50.  
 \*\*\* When ALS inop, increase CAT AB vis to 1 mile, RVR to 50,  
 CAT CD vis to  $1\frac{1}{2}$  miles, RVR to 60, CAT E vis to  $1\frac{1}{2}$  miles.

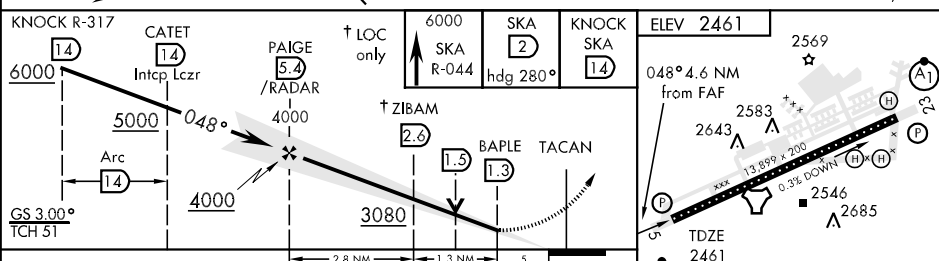
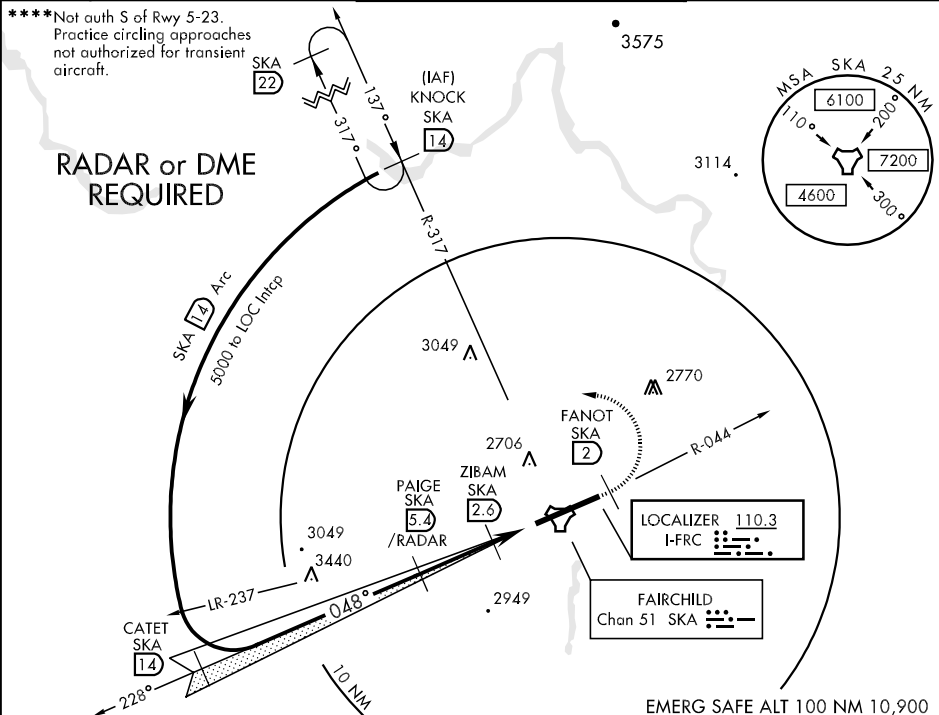


MISSED APPROACH: Climb to 6000 via SKA R-044.  
 At SKA 2 DME turn left hdg 280° to intcp SKA R-317  
 to KNOCK and hold, continue climb in hold to 6000.

ATIS <b>257.625</b>	SPOKANE APP CON <b>026°-204° 133.35 263.0</b> <b>205°-025° 123.75 282.25</b>	FAIRCHILD TOWER <b>120.35 233.7</b>	GND CON <b>123.6 275.8</b>
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\*\*\*\* Not auth S of Rwy 5-23.  
 Practice circling approaches  
 not authorized for transient  
 aircraft.

**RADAR or DME  
REQUIRED**



CATEGORY	A	B	C	D	E
S-ILS 5 *	2661/18 200 (200-1/2)				2661/24 200 (200-1/2)
S-LOC/DME 5 **	2740/24 279 (300-1/2)				2740/40 279 (300-3/4)
S-LOC 5 ***	2880/24 419 (500-1/2)				2880/50 419 (500-1)
CIRCLING ****	3480-1 1019 (1100-1 1/4)	3480-1 1019 (1100-1 1/2)	3480-3 1019 (1100-3)		

LOC I-SKA <b><u>110.3</u></b>	APCH CRS <b>228°</b>	Rwy Idg <b>13,899</b> TDZE <b>2422</b> Arpt Elev <b>2461</b>
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AL-553 [USAF]

FAIRCHILD AFB (KSKA)

**T** \* When ALS inop, increase vis to  $\frac{3}{4}$  mile, RVR to 40.  
When TDZL/CL lights inop, increase CAT ABCD RVR to 24.  
\*\* When ALS inop, increase vis to 1 mile, RVR to 50.

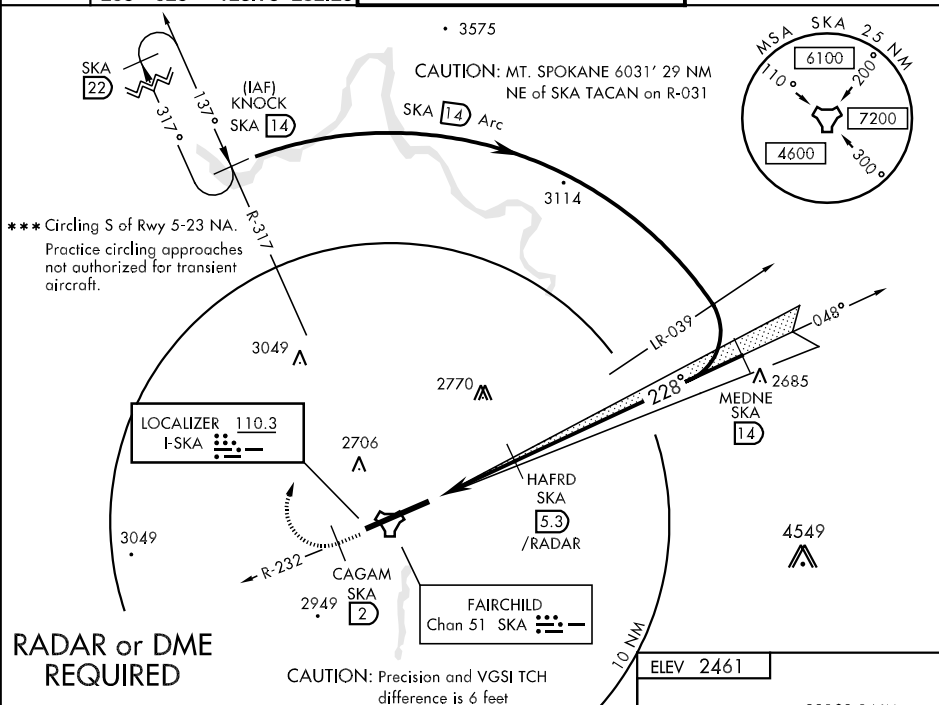


**MISSED APPROACH:** Climb to 6500 via SKA R-232. At SKA 2 DME, turn right heading 340° to intcp SKA R-317 to KNOCK and hold, continue climb in hold to 6500.

ATIS	SPOKANE APP CON			
257.625	026°-204°	133.35	263.0	
	205°-025°	123.75	282.25	

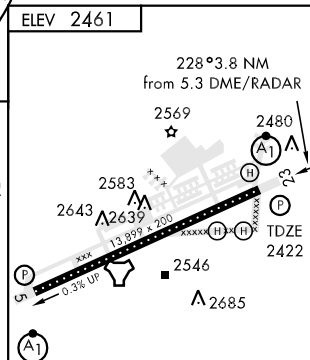
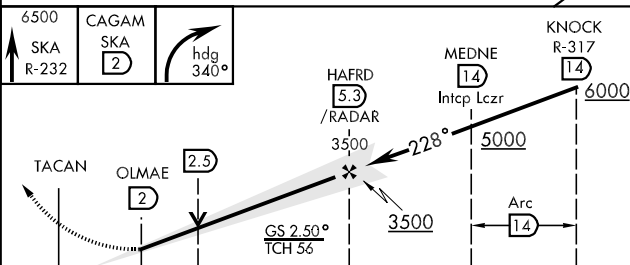
FAIRCHILD TOWER  
120.35 233.7

GND CON  
123.6 275.8



EMERG SAFE ALT 100 NM 10,900

6500 ↑ SKA R-232	CAGAM SKA 2	hdg 340°
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CATEGORY	A	B	C	D	E
S-ILS 23 *	2622/18 200 (200-½)				2622/24 200(200-½)
S-LOC 23 **	2720/24 298 (300-½)		2720/40 298 (300-¾)		
CIRCLING ***	3480-1½ 1019 (1100-1¼)	3480-1½ 1019 (1100-1½)	3480-3 1019 (1100-3)		

HIRL Rwy 5-23
TDZL/CL Rwy 5-23

FAF to MAP 3.3 NM

Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

TACAN SKA  
Chan 51APCH CRS  
057°Rwy ldg 13,899  
TDZE 2461  
Arpt Elev 2461

AL-553 [USAF]

FAIRCHILD AFB (KSKA)

✦ \* When ALS inop, CAT ABC vis to 1 mile, RVR to 50,  
CAT DE vis to 1½ miles, RVR to 60.



MISSED APPROACH: Climb to 6000 via SKA R-044.  
At SKA 2 DME turn left hdg 280° to intcp SKA R-317  
to KNOCK and hold, continue climb in hold to 6000.

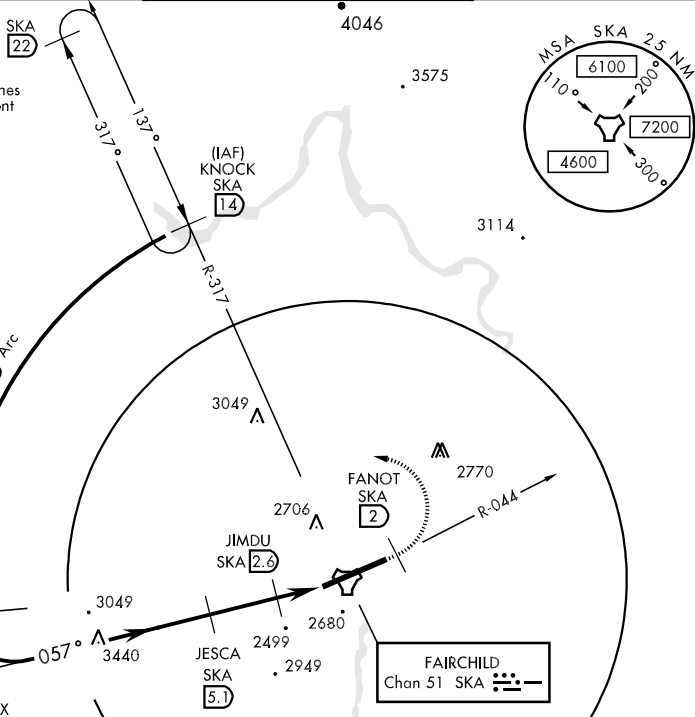
ATIS  
257.625

SPOKANE APP CON  
026°-204° 133.35 263.0  
205°-025° 123.75 282.25

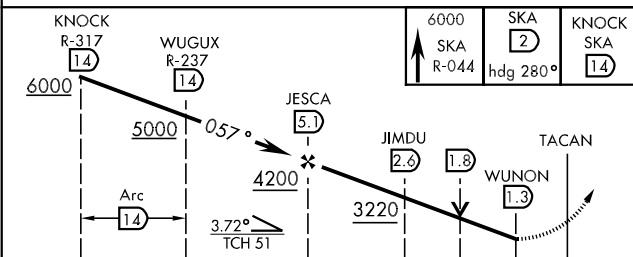
FAIRCHILD TOWER  
120.35 233.7

GND CON  
123.6 275.8

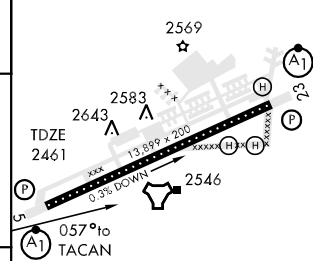
\*\* Not auth S of Rwy 5-23.  
Practice circling approaches  
not authorized for transient  
aircraft.



EMERG SAFE ALT 100 NM 10,900



ELEV 2461



CATEGORY	A	B	C	D	E
S-5 *	2820/24	359 (400-½)	2820/40	359 (400-¾)	
CIRCLING **	3480-1¼ 1019 (1100-1¼)	3480-1½ 1019 (1100-1½)	3480-3	1019 (1100-3)	

HIRL Rwy 5-23  
TDZL/CL Rwy 5-23

TACAN SKA Chan 51	APCH CRS 226°	Rwy ldg 13,899 TDZE 2422 Arpt Elev 2461
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AL-553 [USAF]

FAIRCHILD AFB (KSKA)

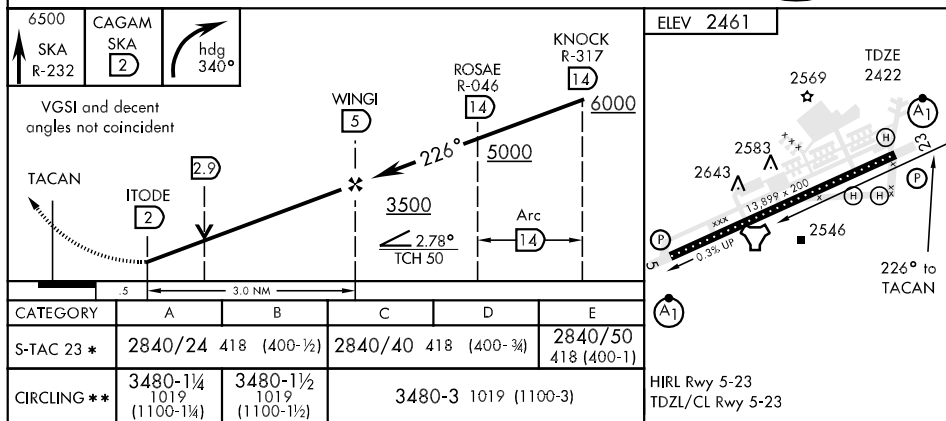
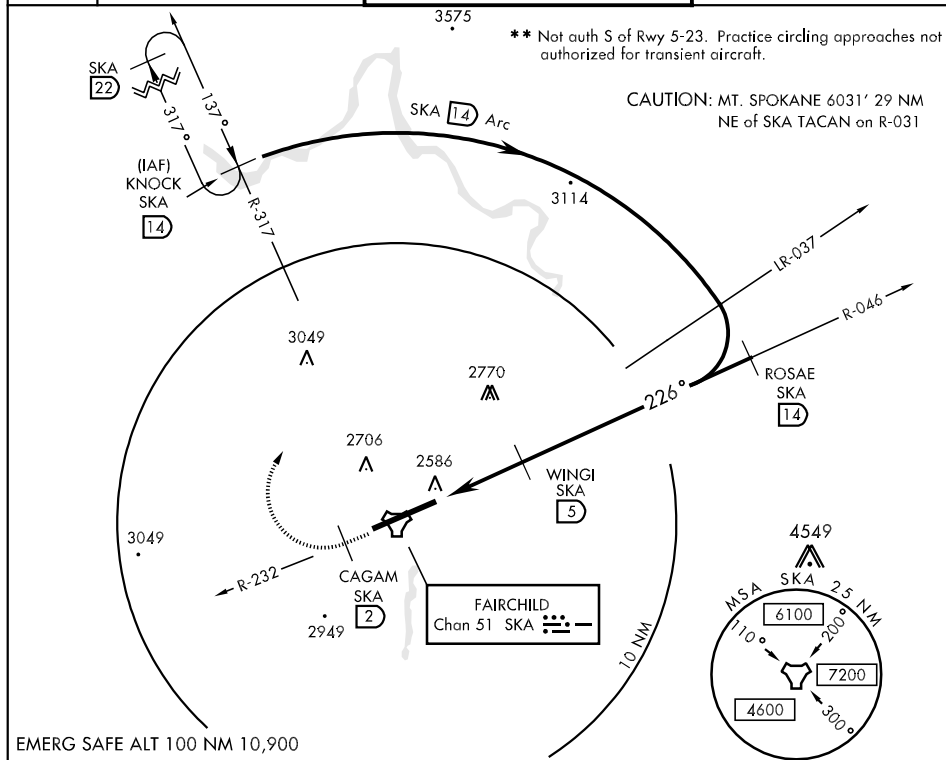
▼ \* When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT CD vis to 1¼ mile, RVR to 60, CAT E vis to 1½ miles.

ALSF-1



MISSED APPROACH: Climb to 6500 via SKA R-232. At SKA 2 DME, turn right heading 340° to intcp SKA R-317 to KNOCK and hold, continue climb in hold to 6500.

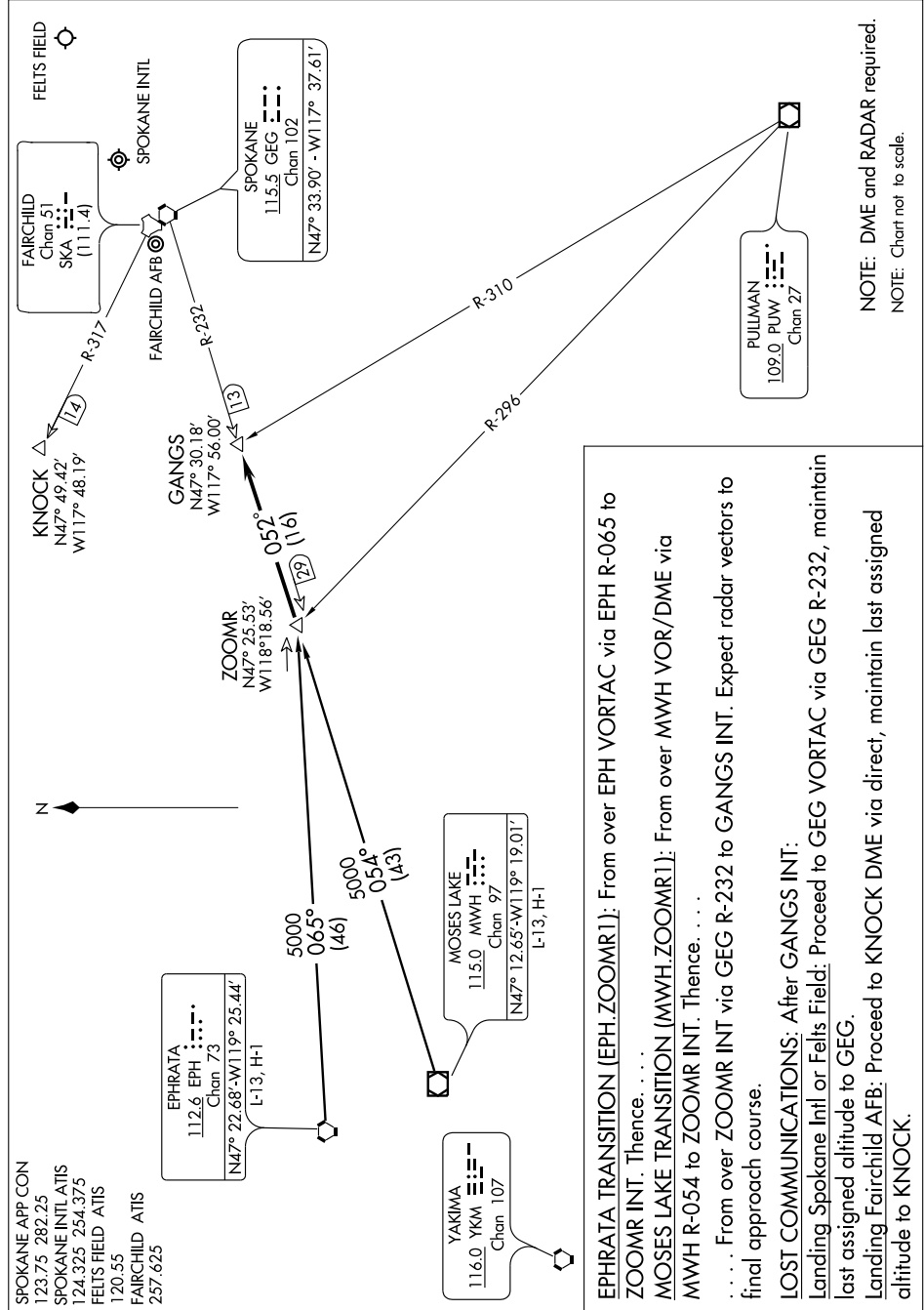
ATIS 257.625	SPOKANE APP CON 026°-204° 133.35 263.0 205°-025° 123.75 282.25	FAIRCHILD TOWER 120.35 233.7	GND CON 123.6 275.8
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# ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON

NW-1, 21 OCT 2010 18:18



# ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010

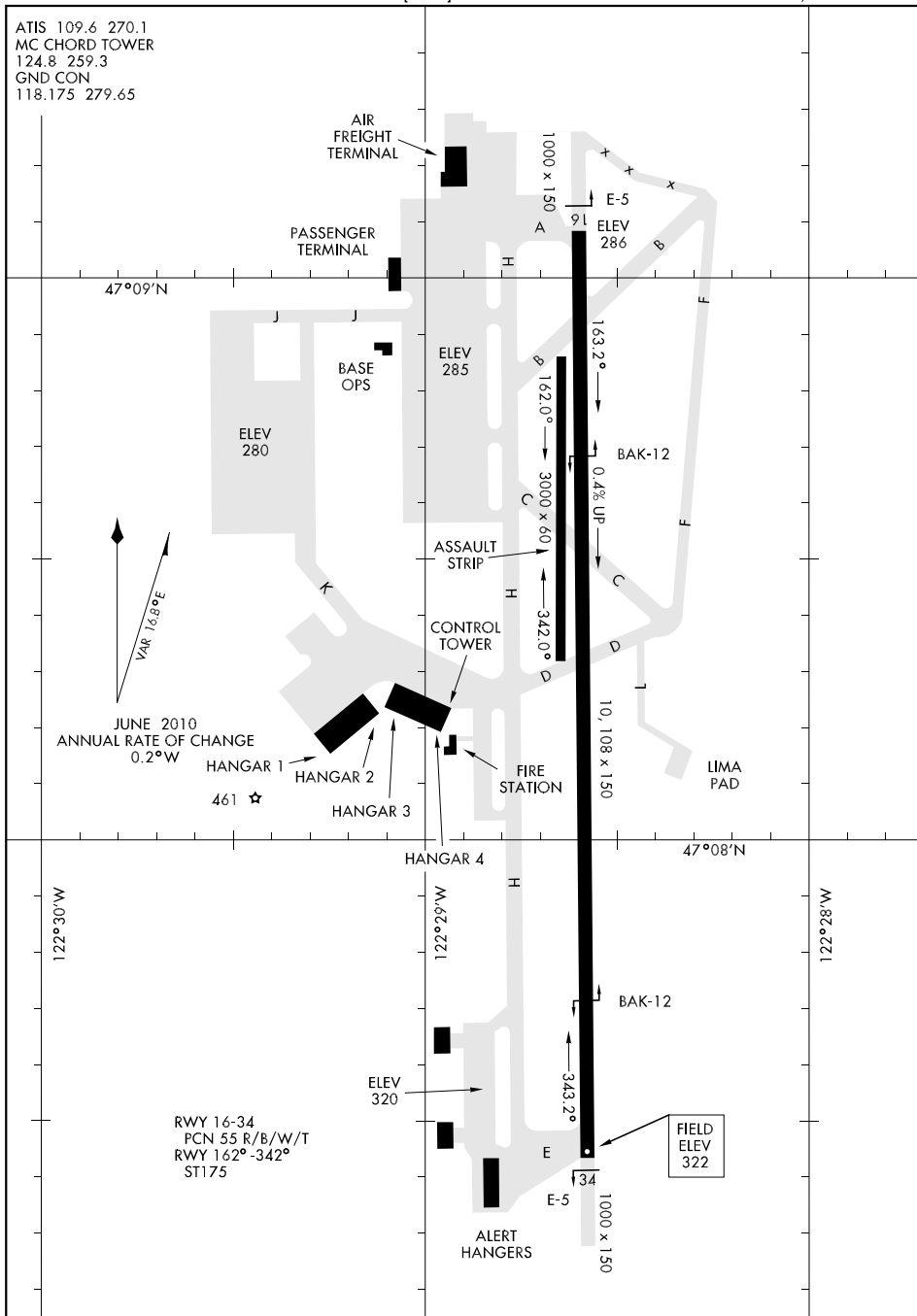
## AIRPORT DIAGRAM

[USAF] AFD-414

TACOMA, WASHINGTON

ATIS 109.6 270.1  
MC CHORD TOWER  
124.8 259.3  
GND CON  
118.175 279.65

NW-1, 21 OCT 2010 to 18 NOV 2010



NW-1, 21 OCT 2010 to 18 NOV 2010

## AIRPORT DIAGRAM

TACOMA, WASHINGTON  
MC CHORD FIELD (KTCM)

**MC CHORD FIELD (JOINT BASE LEWIS—MCCHORD)** (TCM)(KTCM) AF 3 S UTC-8(-7DT)

SEATTLE

N47°08.26' W122°28.59'

H-1B, L-1D

322 B TPA—See Remarks AOE Class I, ARFF Index Ltd. NOTAM FILE SEA Not insp.

DIAP, AD

**RWY 16-34:** H10108X150 (ASPH-CONC-GRVD)

PCN 55 R/B/W/T HIRL (NSTD) CL

**RWY 16:** ALSF1. PAPI(P4L). 0.4% up.**RWY 34:** ALSF2. TDZL. PAPI(P4R). Rgt ttc.**RWY 162-342:** H3000X60 (ASPH)**ARRESTING GEAR/SYSTEM****RWY 16** ← HOOK E5 (240' OVRN) HOOK BAK-12B(B) (2450')HOOK BAK-12B(B) (1668') HOOK E5 (102' OVRN) → **RWY 34**

**MILITARY SERVICE:** LGT Visual TCH set for height group 3 acft only. **RWY 16-34** center 72' thld lgt removed. PAPI GS not coincidental with ILS GS. AMP-1/AMP-3 Overt/Covert assault strip lights installed in middle 5000' **RWY 16-34. A-GEAR** When **RWY 16-34** activated, apch end E5 is removed. **RWY 16-34 BAK-12B** 30 minute prior notice rqr to connect cable. **JASU** (MD-3M) 1(MD-3) 1(MA-1A) (AM32A-60) 1(MC-11) **FUEL** A1+ **FLUID** SP PRESAIR De-ice—Expect 3 hr delay. LHOX LOX **OIL** O-128-133-148-156 SOAP. SOAP results rqr 24 hr, weekdays (1530-0030Z) except holidays, results not avbl other times. Tran acft req SOAP will arrive with historical engine SOAP data for trend analysis. **TRAN ALERT** Opr 24 hr. Delays can be expected. Parking limited.

**MILITARY REMARKS:** See FLIP AP/1 Supplementary Arpt Information. **RSTD** PPR includes scheduled AMC missions due to limited ramp space, tran acft parking extremely ltd. 24 hr prior coordination req, Base OPS DSN 382-5611, C253-982-5611. All inbound acft must ctc Command Post no later than 30 min prior to ldg. AMC acft opr rstd during Bird Watch Condition Moderate (tkf and ldg permission only when dep/arr route avoid identified bird activity, no local IFR/VFR tfc pattern activity) and Severe (tkf and ldg prohibited without OG/CC approval), ctc PTD/ATIS/Command Post for current Bird Watch Condition. Tran aircrews conducting local area low-level training missions must receive local procedure/rstd briefing from 62 OSS/OSK at DSN 382-3615, C253-982-3615. **CAUTION** When performing pre-tkf engine runup, align acft so that debris is not blown toward ADTAC alert hangar or adjacent acft parking ramp. During VFR conditions, acft making low apch, normal tkf, touch and go ldg, or missed apch remain at or below 1800' until dep end of the rwy. Bird hazard. South end rwy not visible from official wx station obsn point. When fog/low clouds are present over apch end **RWY 34**, condition report from obsn point may not be representative. **TFC PAT** Before ldg maintain tfc pattern altitude commensurate with safety as long as practicable. TPA—Rectangular 1800' (1478) overhead 2300' (1978). **MISC** Aircrews notify PTD anytime they plan to delay in local IFR pattern on separate clearance prior to or departure on filed flt plan. Base OPS DSN 382-5611, C253-982-5611. South 1000' **RWY 16-34** is concrete, rwy is grvd. Afd wx monitored by the AN/FMQ-19 Automated Observing System and augmented by human observer when wx flt fcst on duty. DSN 312-382-3434/5005 C 253-982-3434/5005. Opr Wx Squadron 25 OWS, Davis-Monthan AFB. DSN 312-228-6596/6599 C 520-228-6598/6599. Toll free 1-877-451-8367.

**COMMUNICATIONS:** SFA D-ATIS 109.6 270.1 (DSN 382-2847 C 253-982-2847.) PTD 372.2⑤ **SEATTLE APP/DEP CON** 126.5 377.15**TOWER** 124.8 259.3 109.6T **GND CON** 118.175 279.65

**COMD POST** 134.1 349.4 (134.1 Commercial contract acft only) **PMSV METRO** 342.3 PMSV svc avbl only when wx flt fcst on duty. Wx obsn avbl H24 via automated obsn sys. Wx flt fcst on duty normal wing flying hrs and msn C-17 limiting criteria DSN 253-382-3434, C253-982-3434. During wx flt closures remote briefing svc avbl from 25 Op Wx Flt Squadron DSN 312-228-6598/6599/6588. Unusable 095°-102° byd 34 NM blo 9400'.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE TCM.(T) **VORTAC** 109.6 TCM Chan 33 N47°08.86' W122°28.50' at fld. 284/22E. No NOTAM MP Tue, Thu 0700-1600Z. VOR unusable 235°-325° byd 10 NM.**ILS** 109.9 I-MAR **RWY 16.** Back course unusable. No NOTAM MP Wed and Fri 0700-1400Z.**ILS X** 108.5 I-TCM **RWY 34.** Back course unusable. **RWY 34** localizer critical area not protected. No NOTAM MP Wed and Fri 0700-1400Z.**ILS Y** 108.5 I-TCM **RWY 34.** Back course unusable. **RWY 34** localizer critical area not protected. No NOTAM MP Wed and Fri 0700-1400Z.**MEAD FLYING SERVICE** (70S) 1 N UTC-8(-7DT) N47°47.23' W117°21.49'

SEATTLE

1905 TPA—2505(600) NOTAM FILE SEA

**RWY 16-34:** H2481X30 (ASPH)**RWY 16:** Trees. **RWY 34:** Trees**AIRPORT REMARKS:** Attended continuously. No winter maintenance.**COMMUNICATIONS:** CTAF 122.9**MEARS FLD** (See CONCRETE)

## ALDER-NINE DEPARTURE (ALDER9 • ALDER)

MC CHORD FIELD (KTCM)

TACOMA, WASHINGTON

ATIS  
109.6 270.1  
GND CON  
118.175 279.65  
MC CHORD TOWER  
124.8 259.3  
SEATTLE DEP CON  
126.5 377.15

SL-414 [USAF]

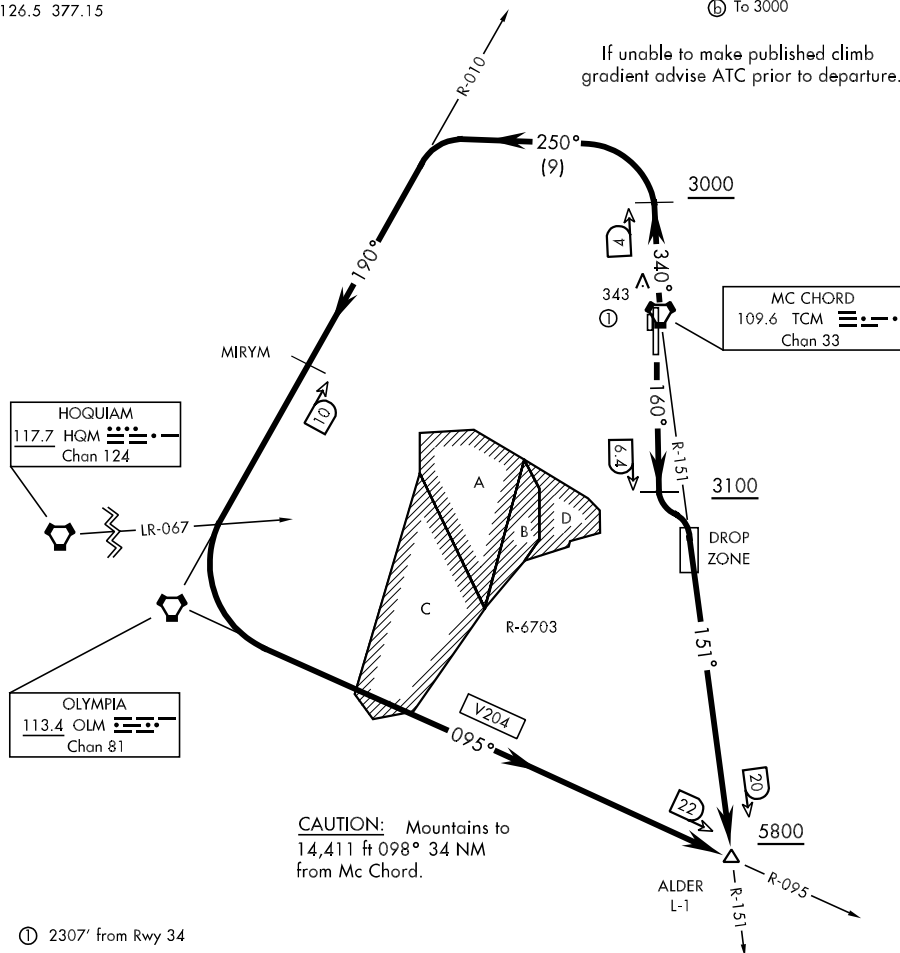
Rwy	Knots	60	120	180	240
16 ⓐ	V/V(fpm)	560	1120	1680	2240
34 ⓑ	V/V(fpm)	730	1450	2180	2890

ATC Climb Rate

ⓐ To 3100

ⓑ To 3000

If unable to make published climb  
gradient advise ATC prior to departure.



## DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RWY 16:** Track heading 160° to TCM VORTAC 6.4 DME, then turn left to intercept the TCM R-151 to ALDER. Cross TCM 6.4 DME at or above 3100, cross ALDER at or above 5800.

**TAKE-OFF RWY 34:** Climb on track 340° to TCM VORTAC 4 DME. Cross TCM 4 DME at or above 3000, then turn left heading 250° to intercept OLM VORTAC R-010/10 DME (MIRYM) to OLM VORTAC. Then via V204 (OLM R-095) to ALDER. Cross ALDER at or above 5800.

ALDER-NINE DEPARTURE (ALDER9 • ALDER)

TACOMA, WASHINGTON  
MC CHORD FIELD (KTCM)

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010



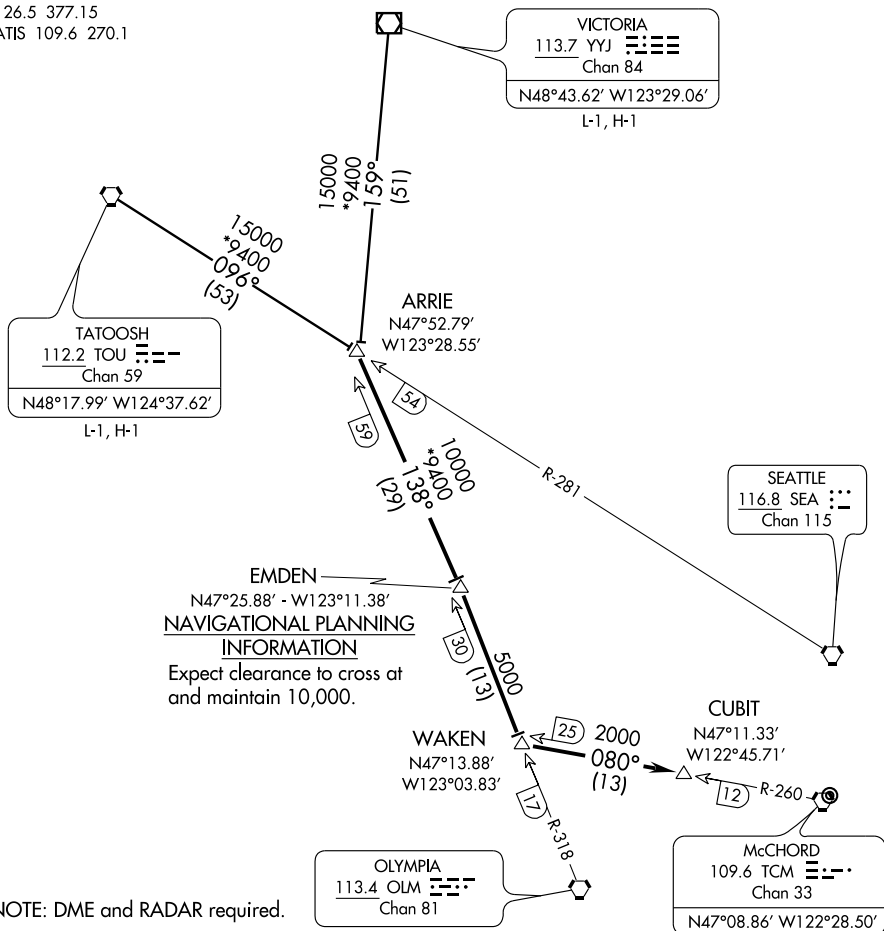
(ARRIE.ARRIE5) 10154

# ARRIE FIVE ARRIVAL

ST-414 (FAA)

McCHORD FIELD  
TACOMA, WASHINGTON

SEATTLE APP CON  
126.5 377.15  
ATIS 109.6 270.1



NOTE: DME and RADAR required.

NOTE: Chart not to scale.

TATOOSH TRANSITION (TOU.ARRIE5): From over TOU VORTAC via TOU R-096 to ARRIE DME Fix. Thence. . .

VICTORIA TRANSITION (YYJ.ARRIE5): From over YYJ VOR/DME via YYJ R-159 to ARRIE DME Fix. Thence. . .

. . . From over ARRIE DME Fix via OLM R-318 and TCM R-260 to CUBIT DME fix. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: Proceed direct to TCM VORTAC.

# ARRIE FIVE ARRIVAL

(ARRIE.ARRIE5) 10154

TACOMA, WASHINGTON  
McCHORD FIELD

NW-1, 21 OCT 2010 to 18 NOV 2010

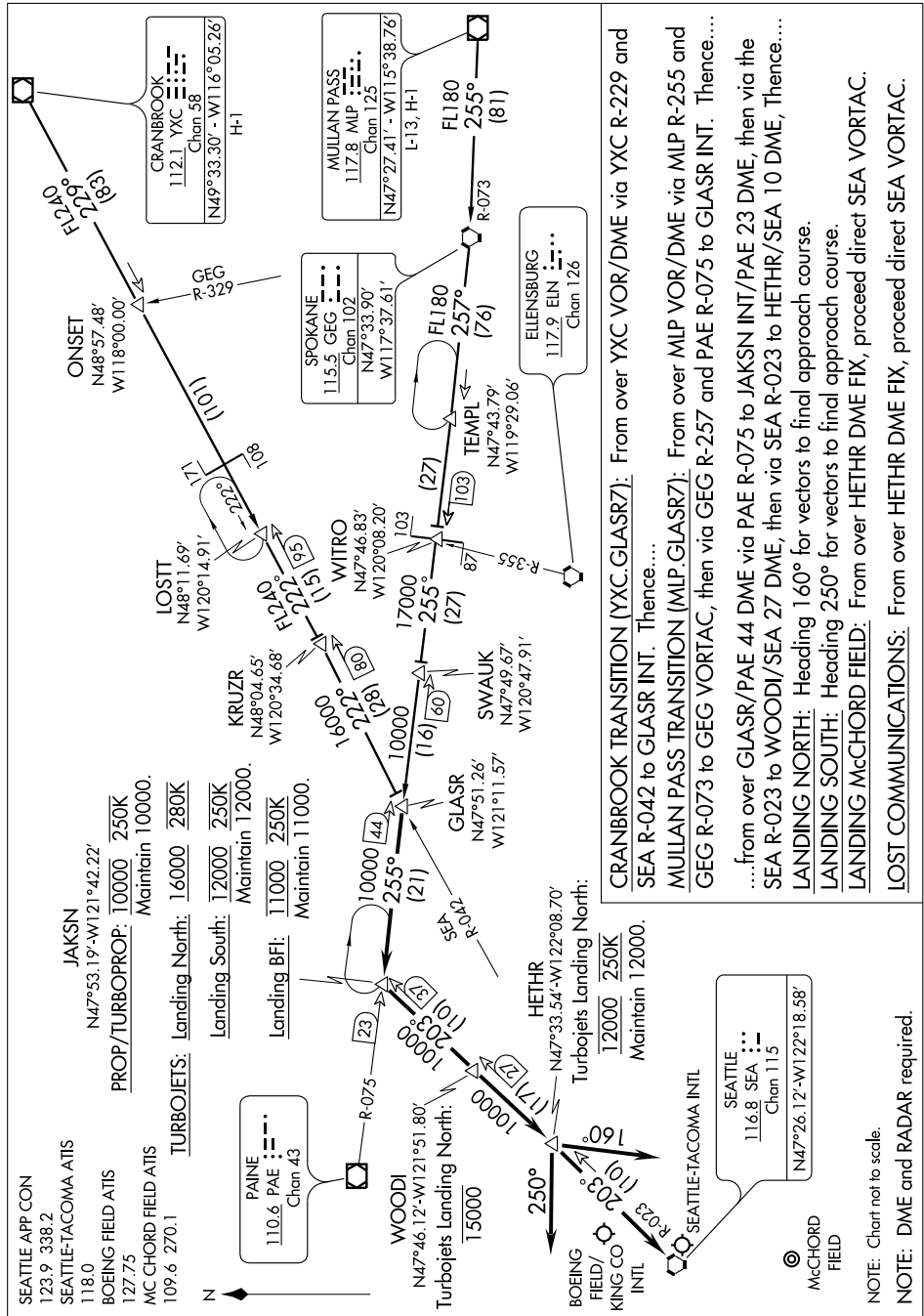
010Z 20Z NOV 2010 1001 12' 1'-MN

# GLASR SEVEN ARRIVAL

10154

ST-582 (FAA)

SEATTLE, WASHINGTON



# GLASR SEVEN ARRIVAL

10154

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010

NOTE: Chart not to scale.  
NOTE: DME and RADAR required.

LOC I-MAR <b>109.9</b>	APCH CRS <b>160°</b>	Rwy Idg <b>10,108</b> TDZE <b>286</b> Arprt Elev <b>322</b>
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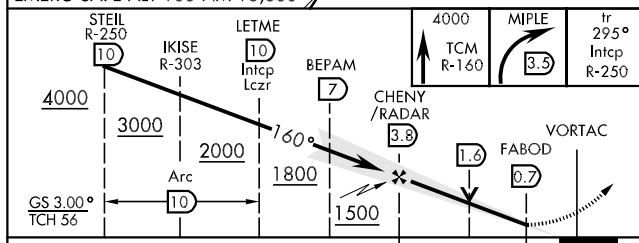
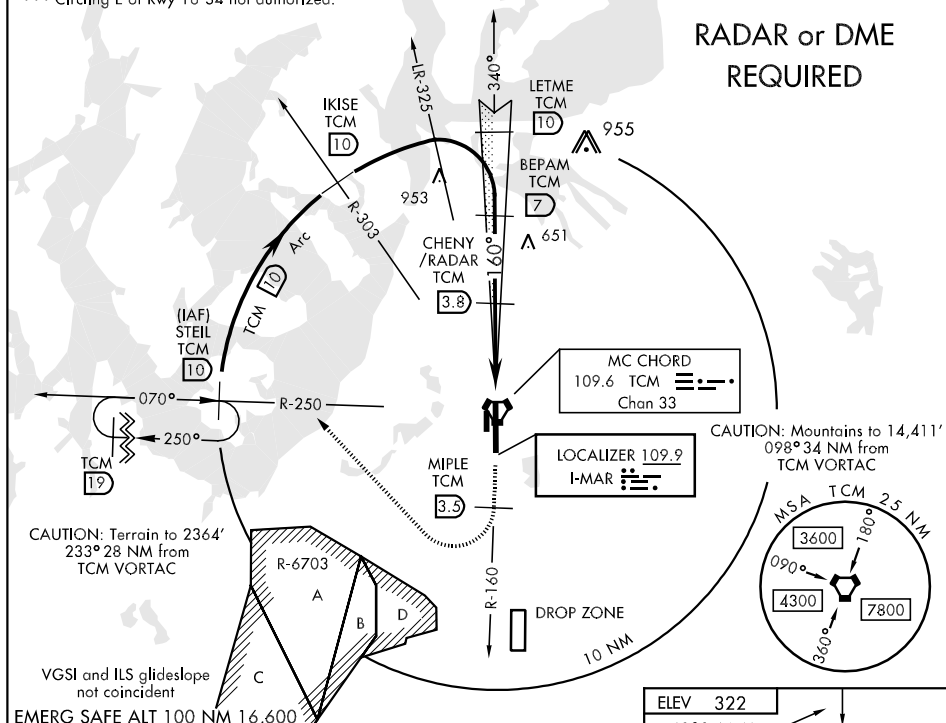
AL-414 [USAF]

MC CHORD FIELD (KTCM)

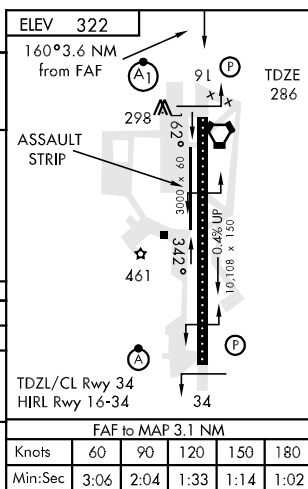
<b>▼</b> * When ALS inop, increase vis to $\frac{3}{4}$ mile, RVR to 40. <b>**</b> When ALS inop, increase CAT AB RVR to 50, vis to 1 mile, CAT C vis to $1\frac{1}{2}$ miles, CAT DE vis to $1\frac{3}{4}$ miles.	<b>ALSF-1</b> 	<b>MISSED APPROACH:</b> Climb to 4000 on TCM VORTAC R-160. At 3.5 DME turn right via 295° course to intercept TCM R-250 to STEIL and hold. Continue climb in hold to 4000.
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ATIS <b>109.6 270.1</b>	SEATTLE APP CON <b>126.5 377.15</b>	MC CHORD TOWER <b>124.8 259.3</b>	GND CON <b>118.175 279.65</b>
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\*\*\* Circling E of Rwy 16-34 not authorized.

RADAR or DME  
REQUIRED

CATEGORY	A	B	C	D	E
S-ILS 16*	486/18	200 (200-½)	486/24	200 (200-½)	
S-LOC 16**	800/40 514 (500-¾)		800/50 514 (500-1)	800/60 514 (500-1¼)	
CIRCLING***	940-1 618 (700-1)		940-1¾ 618 (700-1¾)	940-2 618 (700-2)	940-2¼ 618 (700-2¼)



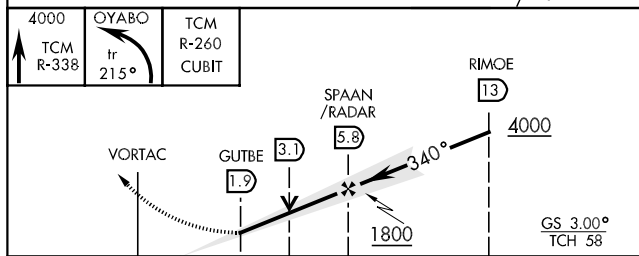
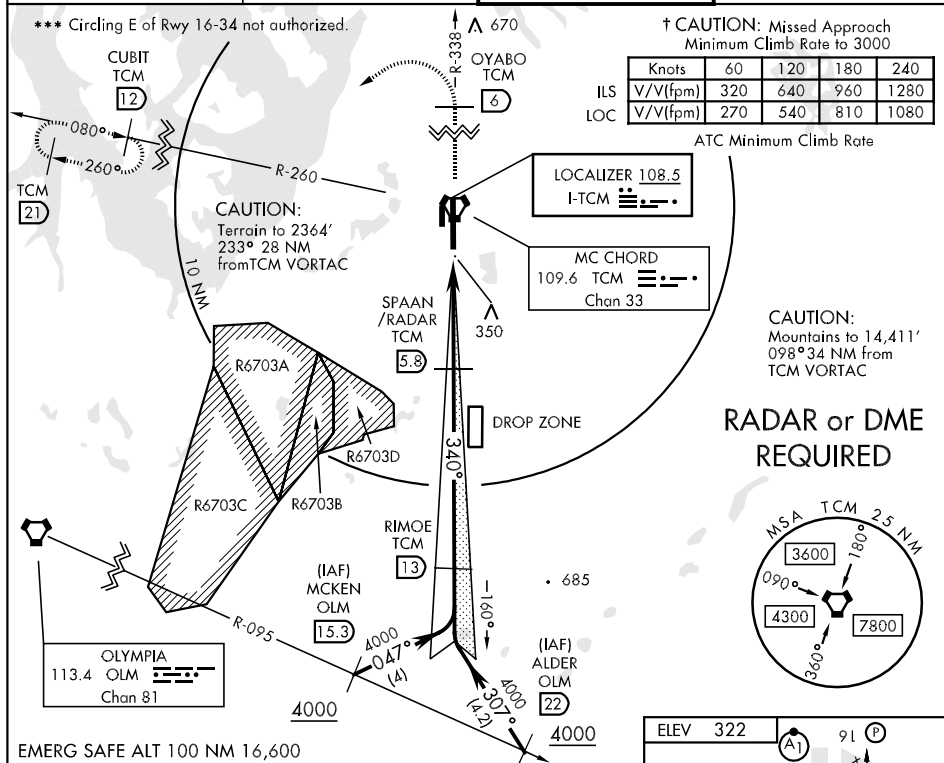
LOC I-TCM <b>108.5</b>	APCH CRS <b>340°</b>	Rwy Idg <b>10,108</b> TDZE <b>322</b> Arpt Elev <b>322</b>
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AL-414 [USAF]

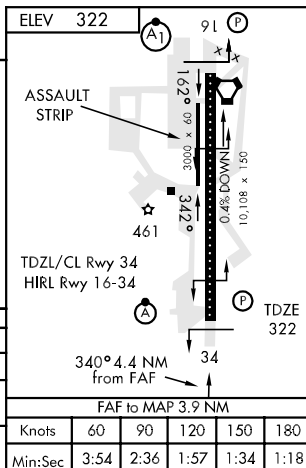
MC CHORD FIELD (KTCM)

<b>▽</b> * When ALS inop, increase vis $\frac{3}{4}$ mile, RVR to 40. ** When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT C vis to $1\frac{1}{2}$ miles, CAT D vis to $1\frac{3}{4}$ miles.	ALSF-2 	<b>† MISSED APPROACH:</b> Climb to 4000 on TCM VORTAC R-338 to OYABO, then turn left via 215° course to intercept TCM R-260 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.
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ATIS <b>109.6 270.1</b>	SEATTLE APP CON <b>126.5 377.15</b>	MC CHORD TOWER <b>124.8 259.3</b>	GND CON <b>118.175 279.65</b>
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CATEGORY	A	B	C	D
S-ILS 34 *	522/18 200 (200- $\frac{1}{2}$ )	522/24 200 (200- $\frac{1}{2}$ )	522/24 200 (200- $\frac{1}{2}$ )	522/24 200 (200- $\frac{1}{2}$ )
S-LOC 34 **	900/24 578 (600- $\frac{1}{2}$ )	900/24 578 (600- $\frac{1}{2}$ )	900/24 578 (600- $\frac{1}{2}$ )	900/24 578 (600- $\frac{1}{2}$ )
CIRCLING ***	940-1 618 (700-1)	940-1 618 (700-1)	940-2 618 (700-2)	940-2 618 (700-2)



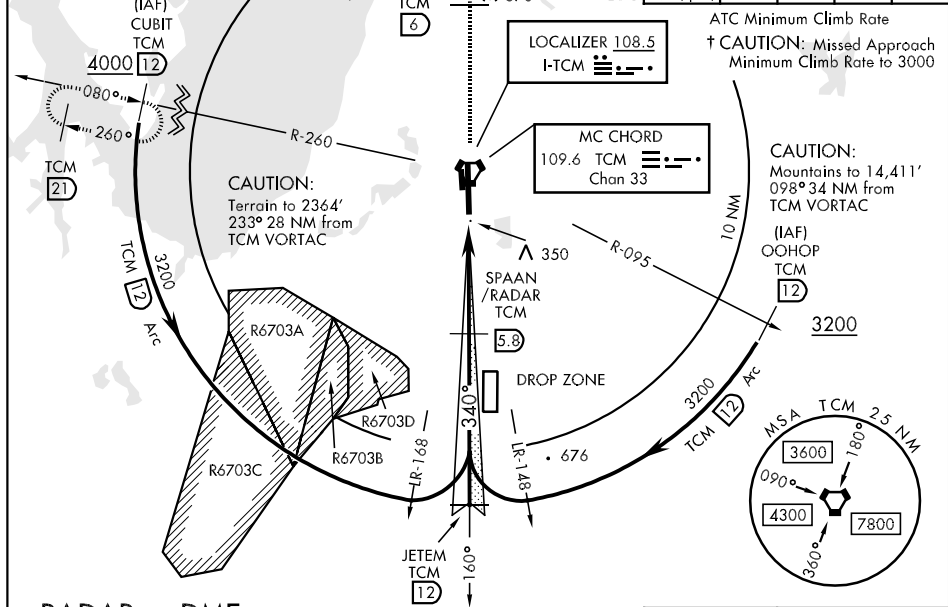
LOC I-TCM <b>108.5</b>	APCH CRS <b>340°</b>	Rwy Idg <b>10,108</b> TDZE Arpt Elev <b>322</b>
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AL-414 [USAF]

MC CHORD FIELD (KTCM)

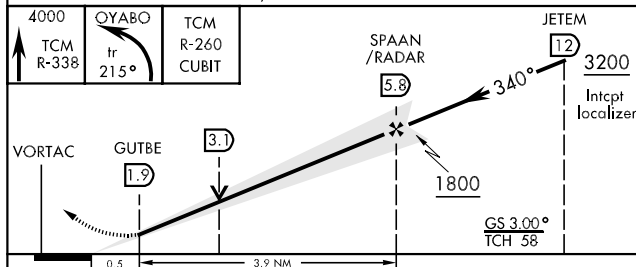
<b>▽</b> * When ALS inop, increase vis $\frac{3}{4}$ mile, RVR to 40. ** When ALS inop, increase CAT A/B vis to 1 mile, RVR to 50, CAT C vis to $1\frac{1}{2}$ miles, CAT D vis to $1\frac{3}{4}$ miles.	<b>ALS-F-2</b> 	<b>† MISSED APPROACH:</b> Climb to 4000 on TCM VORTAC R-338 to OYABO, then turn left via 215° course to intercept TCM R-260 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.
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<b>ATIS</b> <b>109.6 270.1</b>	<b>SEATTLE APP CON</b> <b>126.5 377.15</b>	<b>MC CHORD TOWER</b> <b>124.8 259.3</b>	<b>GND CON</b> <b>118.175 279.65</b>
<b>*** Circling E of Rwy 16-34 not authorized.</b>			
<b>ILS LOC</b>			
<b>Knots</b>			
<b>V/V(fpm)</b>			
<b>V/V(fpm)</b>			

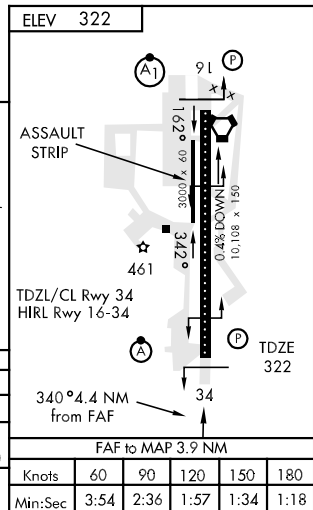


## RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 16,600



CATEGORY	A	B	C	D
S-ILS 34 *	522/24		200	(200- $\frac{1}{2}$ )
S-LOC 34 **	900/24	578 (600- $\frac{1}{2}$ )	900/50 578 (600-1)	900/60 578 (600- $1\frac{1}{2}$ )
CIRCLING ***	940-1	618 (700-1)	940-1 $\frac{3}{4}$ 618 (700- $1\frac{3}{4}$ )	940-2 618 (700-2)



LOC I-TCM  
**108.5**

APCH CRS  
**340°**

Rwy Idg  
TDZE  
Arpt Elev  
**10,108**  
**322**  
**322**

AL-414 [USAF]

MC CHORD FIELD (KTCM)

ALSF-2

† MISSED APPROACH: Climb to 4000 on TCM VORTAC R-338 to OYABO, then turn left via 215° course to intercept TCM R-260 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.

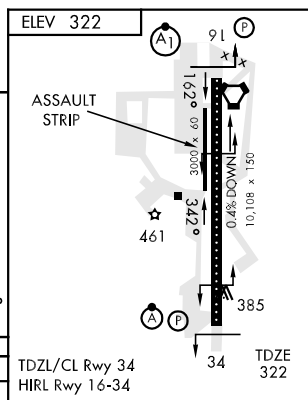
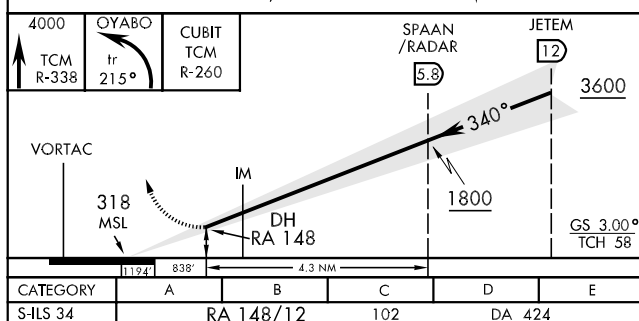
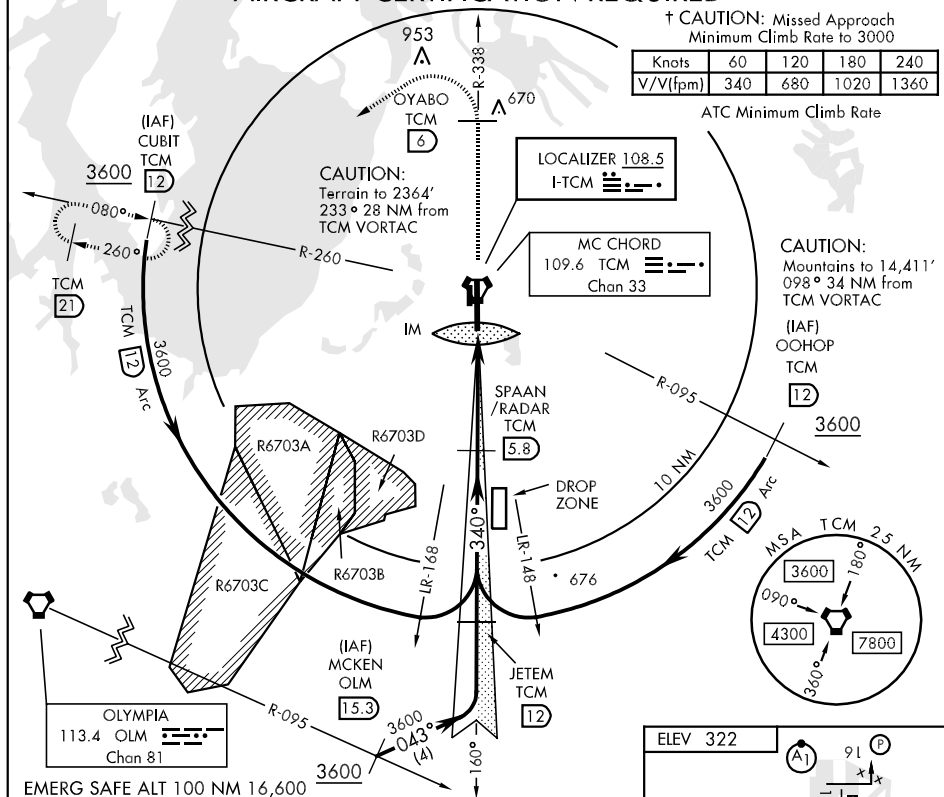
ATIS  
**109.6 270.1**

SEATTLE APP CON  
**126.5 377.15**

MC CHORD TOWER  
**124.8 259.3**

GND CON  
**118.175 279.65**

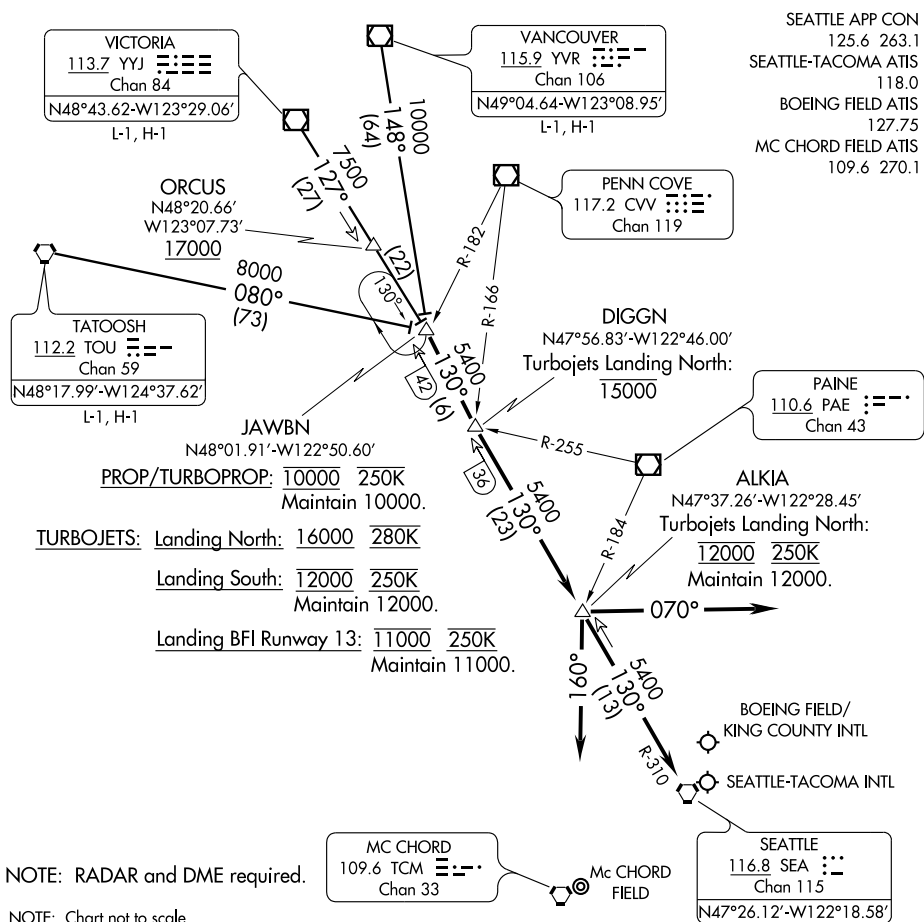
# CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



## JAWBN ONE ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON



TATOOSH TRANSITION (TOU.JAWBN1): From over TOU VORTAC via TOU R-080 to JAWBN INT. Thence...

VANCOUVER TRANSITION (YVR.JAWBN1): From over YVR VORTAC via YVR R-148 to JAWBN INT. Thence...

VICTORIA TRANSITION (YYJ.JAWBN1): From over YYJ VOR/DME via YYJ R-127 to JAWBN INT. Thence...

....From over JAWBN INT/SEA 42 DME via SEA R-310 to DIGGN/SEA 36 DME then via SEA R-310 to ALKIA INT/SEA 13 DME, thence....

LANDING NORTH: Depart ALKIA INT heading 160° for vectors to final approach course.

LANDING SOUTH: Depart ALKIA INT heading 070° for vectors to final approach course.

LANDING McCHORD FIELD: After ALKIA INT proceed direct SEA VORTAC.

LOST COMMUNICATIONS: After ALKIA INT proceed direct SEA VORTAC.

## JAWBN ONE ARRIVAL

(JAWBN.JAWBN1) 10210

SEATTLE, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

## OLYMPIC-THREE DEPARTURE

SL-414 [USAF]

MC CHORD FIELD (KTCM)

TACOMA, WASHINGTON

ATIS  
109.6 270.1  
GND CON  
118.175 279.65  
MC CHORD TOWER  
124.8 259.3  
SEATTLE DEP CON  
126.5 377.15

If unable to make published  
climb gradient advise ATC  
prior to departure.

Rwy	Knots	60	120	180	240
16	⊙ V/V(fpm)	320	640	960	1280
34	⊙ V/V(fpm)	650	1300	1950	2600

ATC Climb Rate

⊙ To 10 DME

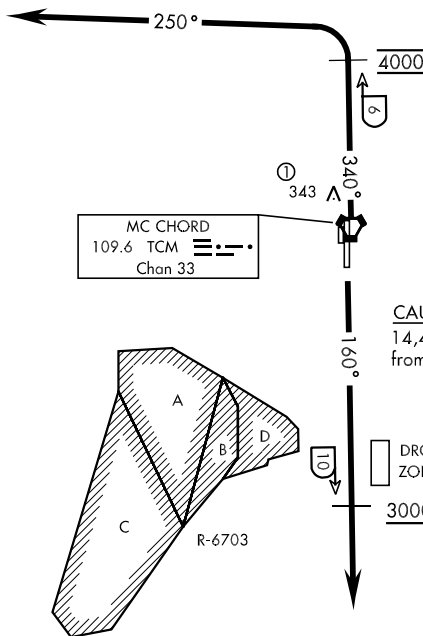
⊙ To 6 DME

## RADAR REQUIRED

Maximum 250 KIAS

SEATTLE  
116.8 SEA  
Chan 115

L-1



OLYMPIA  
113.4 OLM  
Chan 81

L-1

**CAUTION:** Mountains to  
14,411 ft 098° 34 NM  
from Mc Chord.

⊙ 2270' from Rwy 34

## DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RWY 16:** Climb on a track of 160°. Cross TCM VORTAC 10 DME at or above 3000. Maintain (assigned altitude). Expect radar vectors within TCM 8 DME after departure.

**TAKE-OFF RWY 34:** Climb on a track of 340° to TCM VORTAC 6 DME. Cross TCM 6 DME at 4000. Then turn left tracking 250°. Maintain (assigned altitude). Expect radar vectors.

TACOMA, WASHINGTON  
MC CHORD FIELD (KTCM)

OLYMPIC-THREE DEPARTURE

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010



# PUGET-FIVE DEPARTURE

SL-414 [USAF]

MC CHORD FIELD (KTCM)

TACOMA, WASHINGTON

ATIS  
109.6 270.1  
GND CON  
118.175 279.65  
MC CHORD TOWER  
124.8 259.3  
SEATTLE DEP CON  
126.5 377.15

If unable to make published  
climb gradient advise ATC  
prior to departure.

Rwy	Knots	60	120	180	240
16	⊙ V/V(fpm)	320	640	960	1280

ATC Climb Rate

⊙ To 10 DME

## RADAR REQUIRED

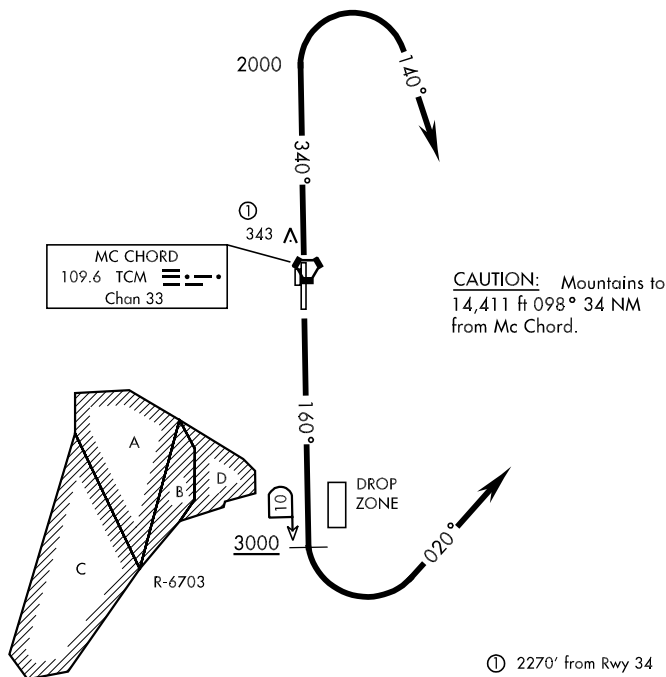
Maximum 250 KIAS

Radar vectors required within 10 NM after departure



SEATTLE  
116.8 SEA  
Chan 115

L-1



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb on a track of 160° to TCM VORTAC 10 DME, then turn left tracking 020°. Cross TCM 10 DME at or above 3000. Maintain (assigned altitude). Expect radar vectors.

TAKE-OFF RWY 34: Climb on a track of 160° to 2000. Then turn right, tracking 140°. Maintain (assigned altitude). Expect radar vectors.

# PUGET-FIVE DEPARTURE

TACOMA, WASHINGTON  
MC CHORD FIELD (KTCM)

VORTAC TCM 109.6 Chan 33	APCH CRS 153°	Rwy Idg 10,108 TDZE 286 Arpt Elev 322
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AL-414 [USAF]

MC CHORD FIELD (KTCM)

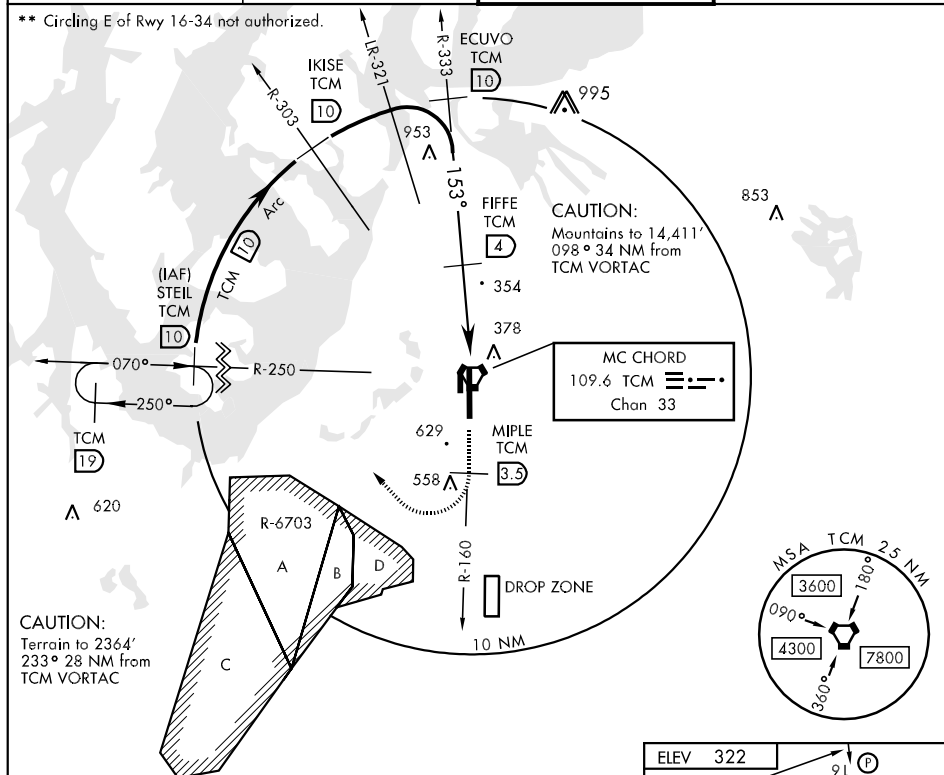
▼ \* When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.



MISSED APPROACH: Climb to 4000 on TCM VORTAC R-160. At TCM 3.5 DME turn right via 295° course to intercept TCM R-250 to STEIL and hold, continue climb in hold to 4000.

ATIS 109.6 270.1	SEATTLE APP CON 126.5 377.15	MC CHORD TOWER 124.8 259.3	GND CON 118.175 279.65
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\*\* Circling E of Rwy 16-34 not authorized.



EMERG SAFE ALT 100 NM 16,600										<div>4000</div> <div>TCM R-160</div>			<div>MIPLE</div> <div>3.5</div>			<div>tr 295° Intcp R-250</div>			<div>153° 3.8 NM from FAF</div> <div>A1</div>			<div>TDZE 286</div>		
<div>STEIL R-250</div> <div>10</div> <div>4000</div> <div>IKISE R-303</div> <div>3000</div> <div>ECUVO R-333</div> <div>2000</div> <div>10</div> <div>FIFFE</div> <div>4</div> <div>153°</div> <div>1600</div> <div>3.13° TCH 68</div> <div>Arc</div> <div>10</div> <div>WALRO</div> <div>1.7</div> <div>7</div> <div>VORTAC</div> <div>3.3 NM</div> <div>.5</div>										<div>ASSAULT STRIP</div> <div>1.62° 0° x 3000'</div> <div>1.50° 0° x 801.0'</div> <div>342°</div> <div>461</div> <div>A</div> <div>P</div> <div>34</div>									<div>TDZL/CL Rwy 34</div> <div>HIRL Rwy 16-34</div>					
CATEGORY		A		B		C		D		E		FAF to MAP 3.3 NM												
S-16 *		800/40		514 (500-¾)		800/50 514 (500-1)		800/60		514 (500-1¼)		Knots		60	90	120	150	180						
CIRCLING **		940-1		618 (700-1)		940-1¾ 618(700-1¾)		940-2 618 (700-2)		940-2 ¼ 618(700-2¼)		Min:Sec		3:18	2:12	1:39	1:19	1:06						

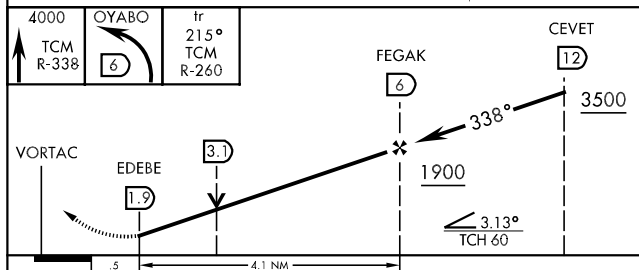
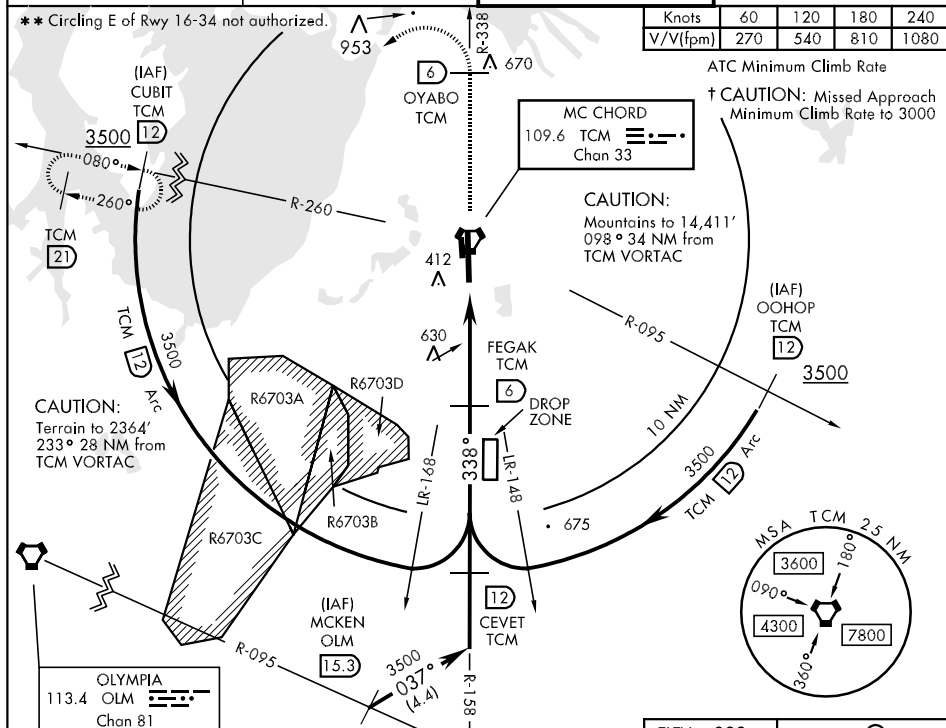
VORTAC TCM 109.6 Chan 33	APCH CRS 338°	Rwy Idg 10,108 TDZE 322 Arpt Elev 322
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AL-414 [USAF]

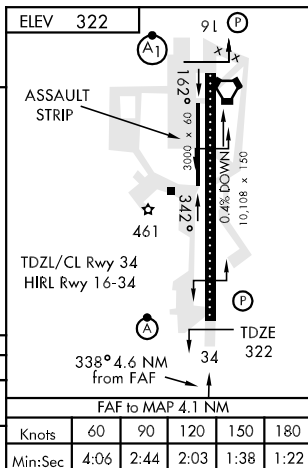
MC CHORD FIELD (KTCM)

<b>▼ * When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT C vis to 1½ miles, CAT D vis to 1¾ miles.</b>	<b>ALSF-2</b> 	<b>† MISSED APPROACH:</b> Climb to 4000 on TCM VORTAC R-338 to 6 DME. Cross TCM 6 DME at or above 3000, then turn left via 215° course to intercept TCM R-260 to CUBIT and hold. Continue climb in hold to 4000.
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<b>ATIS</b> <b>109.6 270.1</b>	<b>SEATTLE APP CON</b> <b>126.5 377.15</b>	<b>MC CHORD TOWER</b> <b>124.8 259.3</b>	<b>GND CON</b> <b>118.175 279.65</b>
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CATEGORY	A	B	C	D
S-34 *	900/24 578 (600-½)	900/50 578 (600-1)	900/60 578 (600-1¼)	900/2 618 (700-1)
CIRCLING **	940-1 618 (700-1)	940-1 618 (700-1¼)	940-2 618 (700-2)	

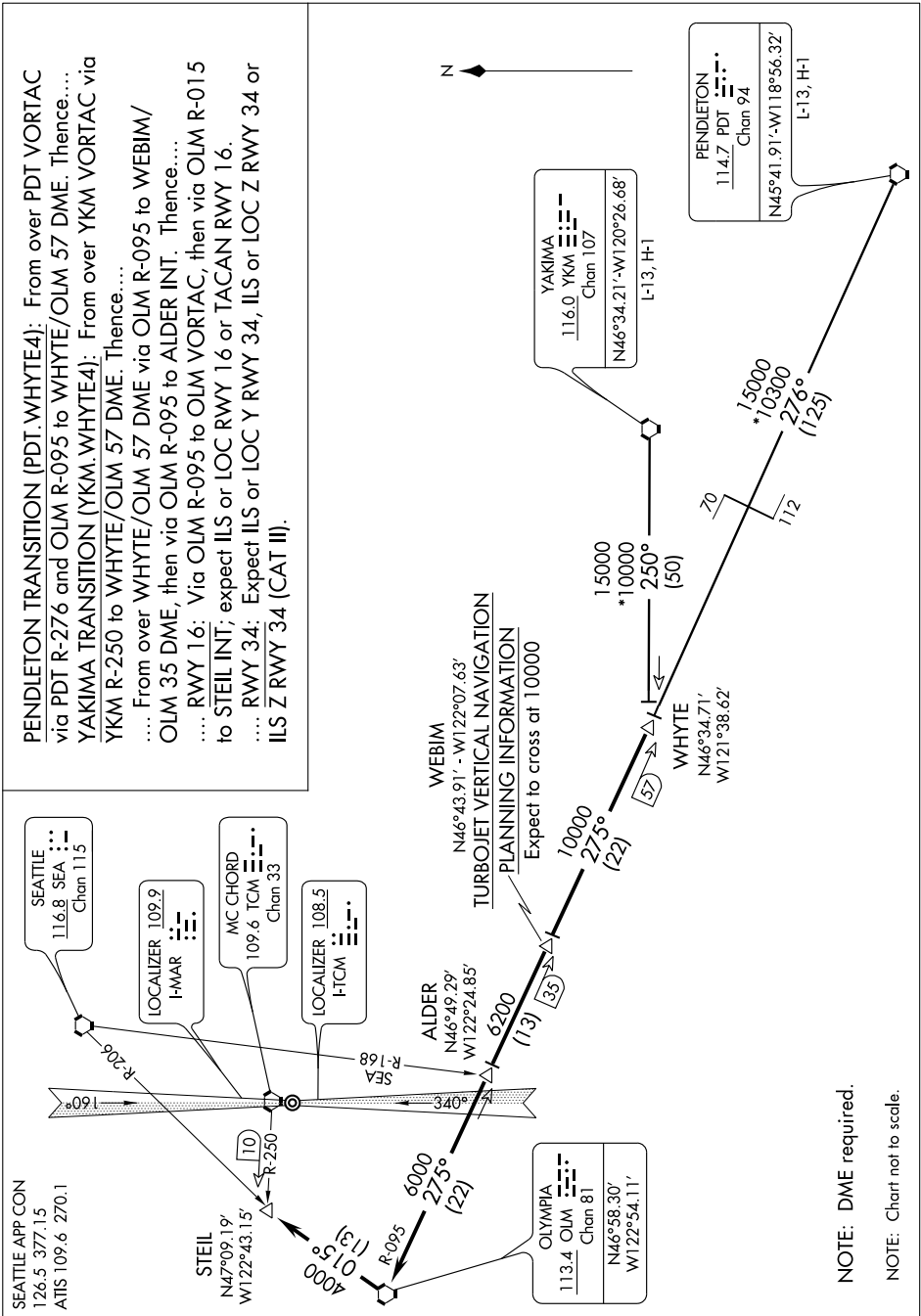


# WHYTE FOUR ARRIVAL

ST-414 (FAA)

McCHORD FIELD  
TACOMA, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



# WHYTE FOUR ARRIVAL

TACOMA, WASHINGTON  
McCHORD FIELD

NW-1, 21 OCT 2010 to 18 NOV 2010

10210

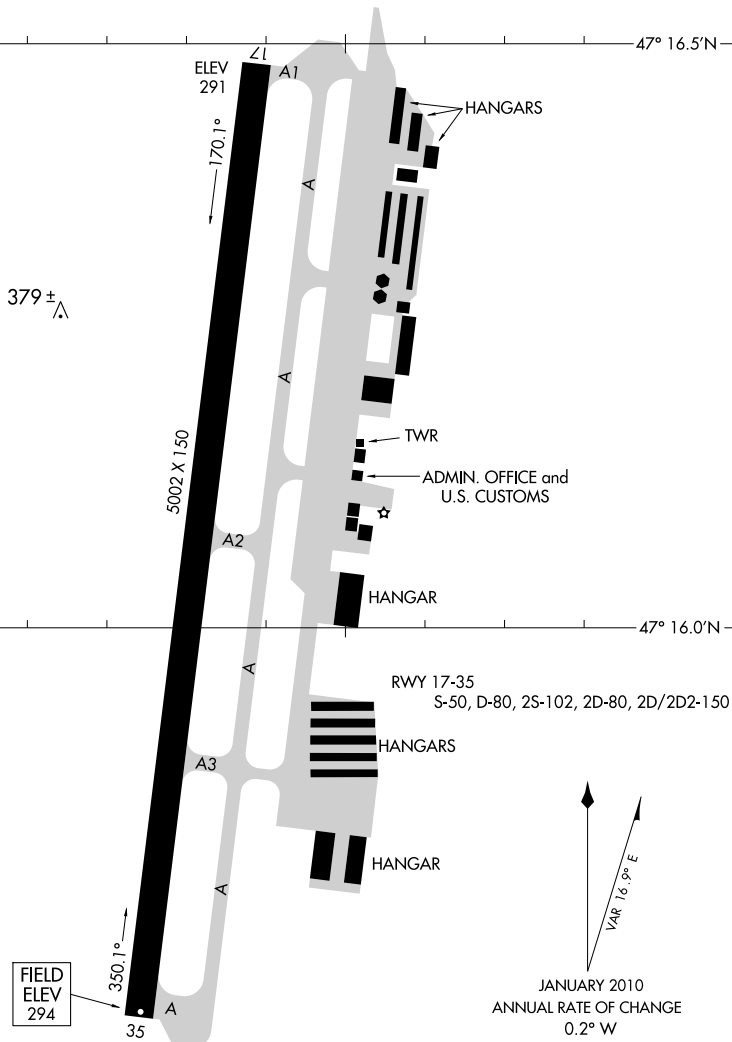
## AIRPORT DIAGRAM

AL-5186 (FAA)

TACOMA NARROWS (TIW)

TACOMA, WASHINGTON

ATIS  
124.05  
TACOMA TOWER ★  
118.5 253.5  
GND CON  
121.8



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBCK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

122° 35'W

122° 34'W

## AIRPORT DIAGRAM

10210

TACOMA, WASHINGTON  
TACOMA NARROWS (TIW)

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

**TACOMA NARROWS** (TIW) 4 W UTC-8(-7DT) N47°16.08' W122°34.69'

294 B S4 FUEL 100LL, JET A OX 4 TPA-1294(1000) LRA NOTAM FILE TIW  
 RWY 17-35: H5002X150 (ASPH-AFSC) S-50, D-80, 2S-102, 2D-80, 2D/2D2-150 MIRL

RWY 17: MALSR. PAPI(P4R)—GA 3.0°. TCH 50'. Rgt tfc.

RWY 35: REIL. VASI(V4L)—GA 3.0° TCH 51'. Rgt tfc.

**AIRPORT REMARKS:** Attended 1500-0600Z±. Deer on and in vicinity of arpt. Noise sensitive arpt, for noise abatement and tfc procedures call arpt manager 253-853-5844. ACTIVATE MALSR Rwy 17 and PAPI Rwy 17—CTAF. For customs call 253-593-6338 ext #2. Landing fee.

**WEATHER DATA SOURCES:** ASOS (253) 858-6507. LAWRS

**COMMUNICATIONS:** CTAF 118.5 ATIS 124.05 UNICOM 122.95

Ⓡ SEATTLE APP/DEP CON 120.1

TOWER 118.5 (1600-0400Z±) GND CON 121.8

**AIRSPACE:** CLASS D svc 1600-0400Z± other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE TCM.

McCHORD (T) VORTAC 109.6 TCM Chan 33 N47°08.26' W122°28.59' 310° 8.9 NM to fld. 284/22E. No NOTAM MP Tue, Thu 0700-1600Z±.

GRAYE NDB (MHW) 216 GRF N47°08.99' W122°36.27' 349° 7.2 NM to fld. NOTAM FILE SEA. Unmonitored when ATCT closed.

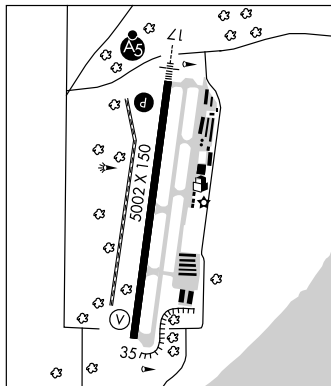
ILS 109.1 I-TIW Rwy 17. Class IA. ILS unmonitored when twr clsd.

**COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.

SEATTLE

H-1B, L-1D

IAP, AD

**TATOOSH** N48°17.99' W124°37.62'. NOTAM FILE SEA.

(H) VORTACW 112.2 TOU Chan 59 151° 21.9 NM to Quillayute. 1652/22E. HIWAS.

RCD 122.25 (SEATTLE RADIO)

SEATTLE

H-1B, L-1D

**TEKOA****WILLARD FLD** (73S) 2 NE UTC-8(-7DT) N47°14.13' W117°02.63'

SEATTLE

2520 B FUEL 100LL NOTAM FILE SEA

RWY 04-22: H2261X40 (ASPH) MIRL

RWY 04: Thld displcd 190'. Tree.

RWY 22: Thld displcd 240'. Road.

**AIRPORT REMARKS:** Unattended. Self service fuel with credit card. Parachute Jumping. Grass areas not avbl for acft ops. ACTIVATE MIRL Rwy 04-22-122.8.

**COMMUNICATIONS:** CTAF 122.9

**TIETON STATE** (See RIMROCK)**TOLEDO****ED CARLSON MEMORIAL FLD-SOUTH LEWIS CO** (TDO) 3 N UTC-8(-7DT)

SEATTLE

N46°28.63' W122°48.39'

374 B S4 FUEL 100 NOTAM FILE TDO

RWY 05-23: H4479X150 (ASPH) S-25 MIRL

RWY 05: REIL. SAVASI(S2L)—GA 3.0° TCH 40'. Windcone.

RWY 23: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Fence.

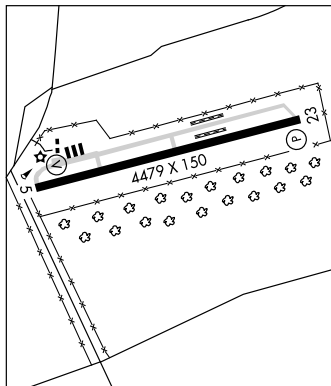
**AIRPORT REMARKS:** Unattended. 24 hr credit card fuel facility. Parachute Jumping. Radio controlled acft adjacent Rwy 05-23 400' and blo. Distance to go markers S side of rwy. ACTIVATE MIRL Rwy 05-23 and REIL Rwy 05 and Rwy 23—CTAF. SAVASI Rwy 05 and PAPI Rwy 23 opr 24 hrs.

**COMMUNICATIONS:** CTAF 122.9

SEATTLE CENTER APP/DEP CON 124.2

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLM.

OLYMPIA (H) VORTACW 113.4 OLM Chan 81 N46°58.30' W122°54.11' 153° 29.9 NM to fld. 200/19E. HIWAS.



LOC I-TIW <b>109.1</b>	APP CRS <b>167°</b>	Rwy Idg TDZE Apt Elev	<b>5002</b> <b>292</b> <b>292</b>
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# ILS RWY 17

## TACOMA NARROWS (TIW)

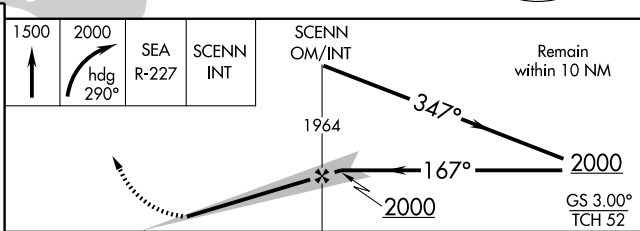
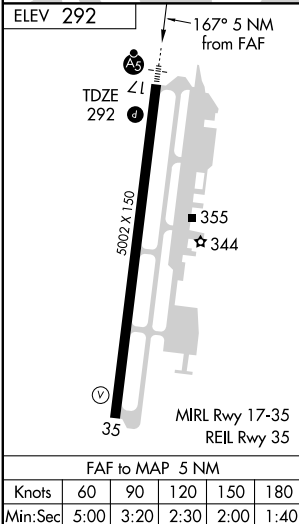
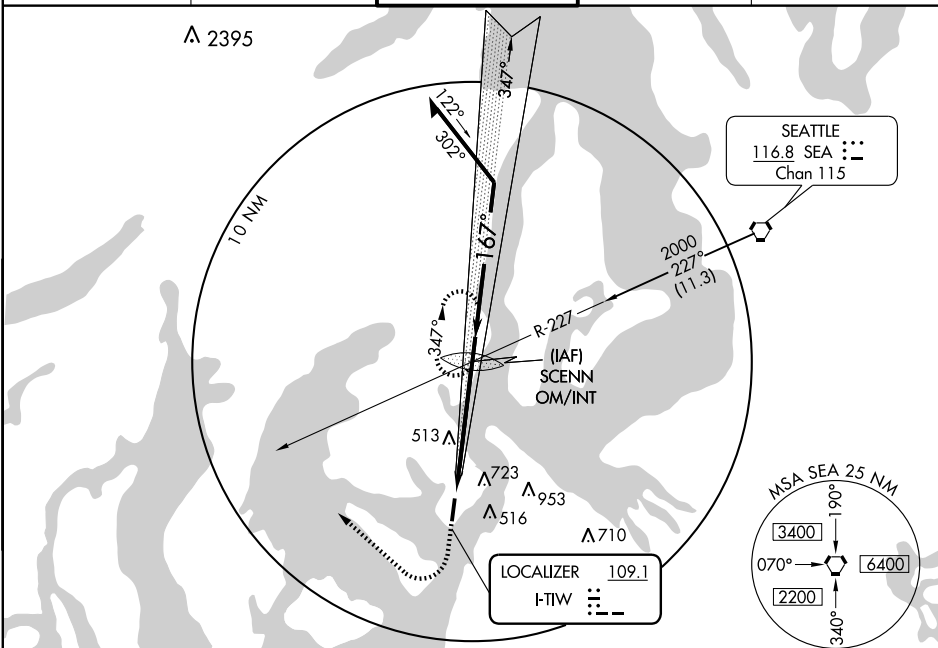
**▼** When control tower closed, obtain local altimeter setting on UNICOM, when not received, use McChord Field altimeter setting minimums.  
**▲** Circling not authorized East of Rwy 17-35.

MALSR



**MISSED APPROACH:** Climb to 1500, then climbing right turn to 2000 via heading 290° and SEA VORTAC R-227 to SCENN INT and hold.

ATIS <b>124.05</b>	SEATTLE APP CON <b>120.1 290.9</b>	TACOMA TOWER★ <b>118.5 (CTAF) 253.5</b>	GND CON <b>121.8</b>	UNICOM <b>122.95</b>
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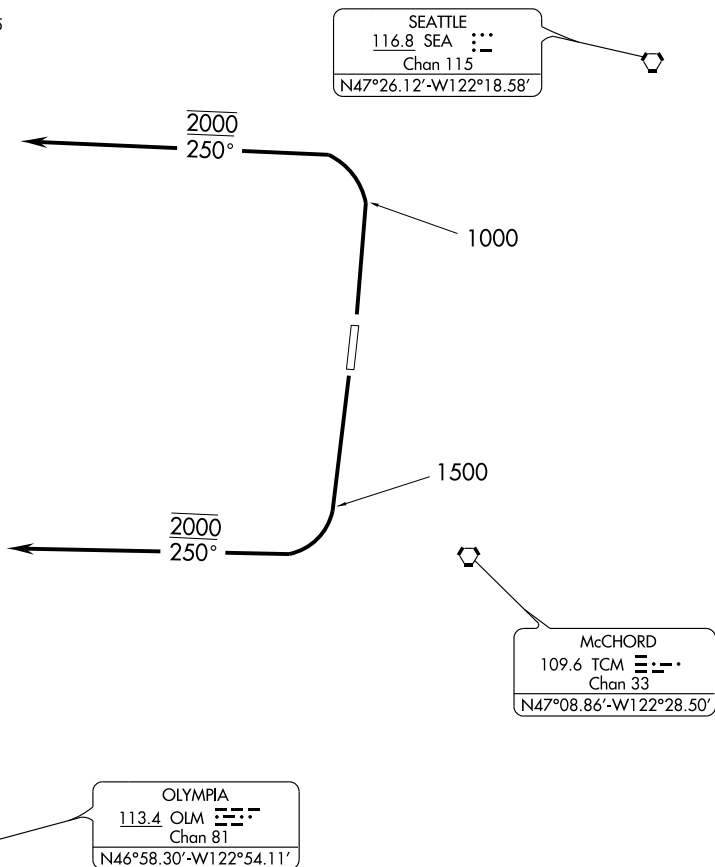
CATEGORY	A	B	C	D
S-ILS 17	492-½ 200 (200-½)			
S-LOC 17	760-½	468 (500-½)	760-¾ 468 (500-¾)	760-1 468 (500-1)
CIRCLING	760-1	468 (500-1)	760-1½ 468 (500-1½)	860-2 568 (600-2)
McCHORD FIELD ALTIMETER SETTING MINIMUMS				
S-ILS 17	517-½ 225 (300-½)			
S-LOC 17	780-½	488 (500-½)	780-¾ 488 (500-¾)	780-1 488 (500-1)
CIRCLING	780-1	488 (500-1)	780-1½ 488 (500-1½)	860-2 568 (600-2)

## NARROWS ONE DEPARTURE

SL-5186 (FAA)

TACOMA NARROWS (TIW)  
TACOMA, WASHINGTON

ATIS 124.05  
GND CON 121.8  
TACOMA TOWER  
118.5 (CTAF) 253.5  
SEATTLE DEP CON  
120.1 290.9



NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RUNWAY 17:** Climb runway heading until leaving 1500, turn right heading 250°, maintain 2000. Expect filed altitude 5 minutes after departure. Expect radar vectors to assigned route

**TAKE-OFF RUNWAY 35:** Climb runway heading until leaving 1000, turn left heading 250°, maintain 2000. Expect filed altitude 5 minutes after departure. Expect radar vectors to assigned route.

**LOST COMMUNICATIONS:** If no transmissions are received for 3 minutes after departure, climb to filed altitude direct SEA VORTAC, thence via assigned route.



NDB GRF <b>216</b>	APP CRS <b>349°</b>	Rwy Idg TDZE Apt Elev	<b>5002</b> <b>292</b> <b>292</b>
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# NDB RWY 35

TACOMA NARROWS (TIW)

**▼** When control tower closed, obtain local altimeter setting on UNICOM; when not received, use McCord Field altimeter setting. Circling NA east of Rwy 17-35.

MISSED APPROACH: Climb to 1000, then climbing left turn to 2000 direct GRF NDB and hold.

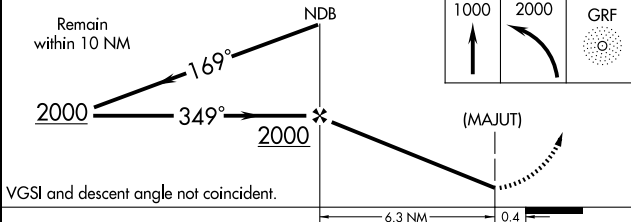
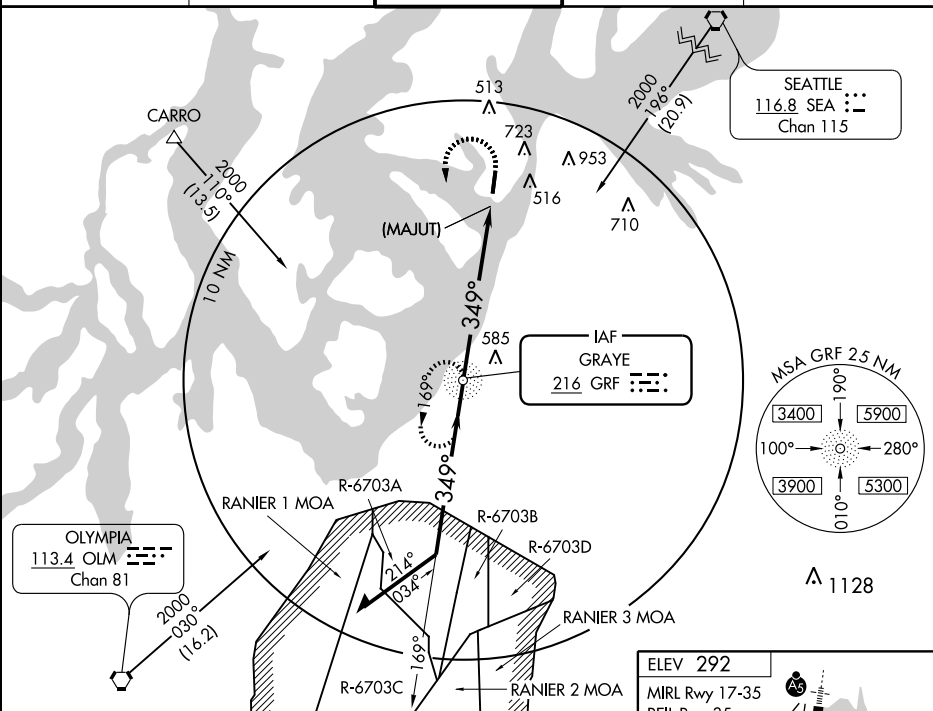
ATIS  
**124.05**

SEATTLE APP CON  
**120.1 290.9**

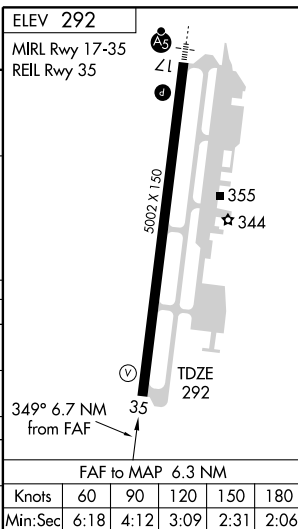
TACOMA TOWER ★  
**118.5 (CTAF) 0 253.5**

GND CON  
**121.8**

UNICOM  
**122.95**



CATEGORY	A	B	C	D
S-35	1000-1	708 (800-1)	1000-2 708 (800-2)	1000-2 ¼ 708 (800-2 ¼)
CIRCLING	1000-1	708 (800-1)	1000-2 708 (800-2)	1000-2 ¼ 708 (800-2 ¼)
McCord Field Altimeter Setting Minimums				
S-35	1020-1	728 (800-1)	1020-2 728 (800-2)	1020-2 ¼ 728 (800-2 ¼)
CIRCLING	1020-1	728 (800-1)	1020-2 728 (800-2)	1020-2 ¼ 728 (800-2 ¼)

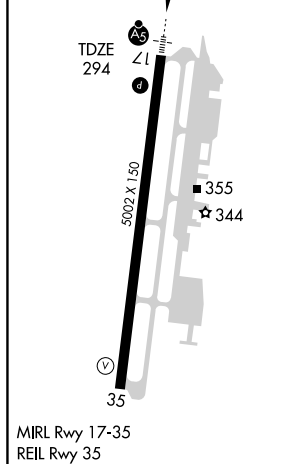
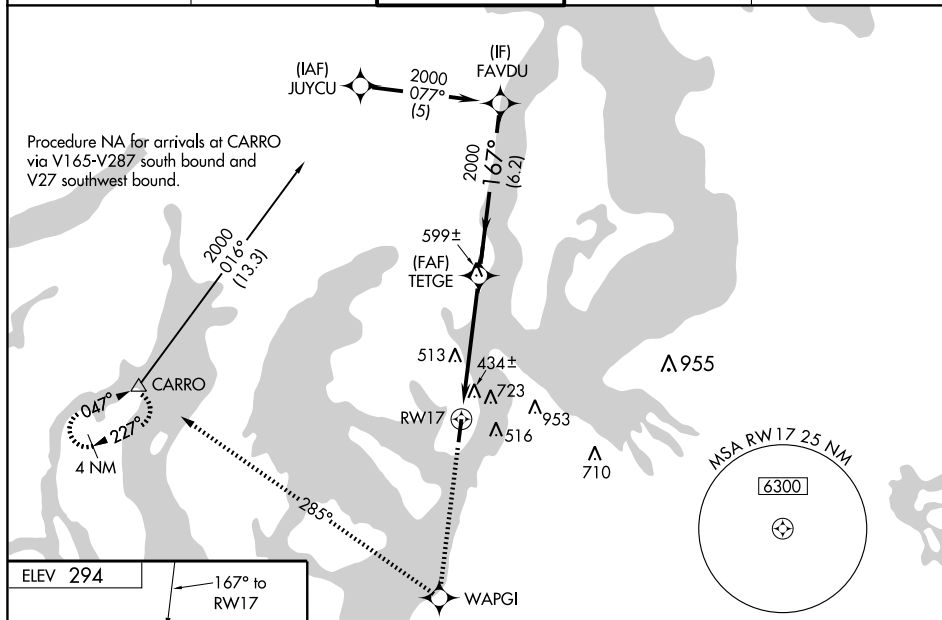


WAAS CH <b>82608</b> <b>W17A</b>	APP CRS <b>167°</b>	Rwy Idg <b>5002</b> TDZE <b>294</b> Apt Elev <b>294</b>
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# RNAV (GPS) RWY 17

	<p>Inoperative table does not apply to UNAV Cats A and B.          Circling NA east of Rwy 17/35.          Baro-VNAV NA when using McChord Field altimeter setting.          For uncompensated Baro-VNAV systems, UNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).          DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.          When local altimeter setting not received, use McChord Field altimeter setting and increase all DA/MDA 40 feet.</p>		<p>MISSED APPROACH: Climb to 4000 direct WAPGI and right turn via 285° track to CARRO and hold, continue climb-in-hold to 4000.</p>
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ATIS 124.05	SEATTLE APP CON 120.1 290.9	TACOMA TOWER ★ 118.5 (CTAF) 0 253.5	GND CON 121.8	UNICOM 122.95
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CATEGORY	A	B	C	D
LPV DA		638-1	344 (400-1)	
LNAV/VNAV		992-2	698 (700-2)	
LNAV MDA	980-1	686 (700-1)	980-1½ 686 (700-1½)	980-1¾ 686 (700-1¾)
CIRCLING	980-1	686 (700-1)	980-2 686 (700-2)	980-2¼ 686 (700-2¼)

WAAS CH <b>50312</b> <b>W35A</b>	APP CRS <b>347°</b>	Rwy Idg TDZE Apt Elev	<b>5002</b> <b>294</b> <b>294</b>
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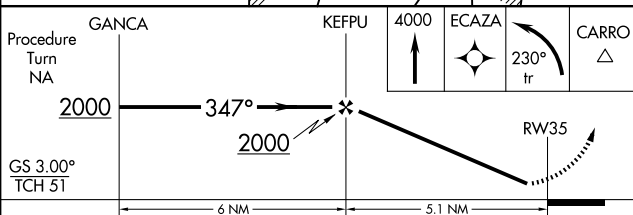
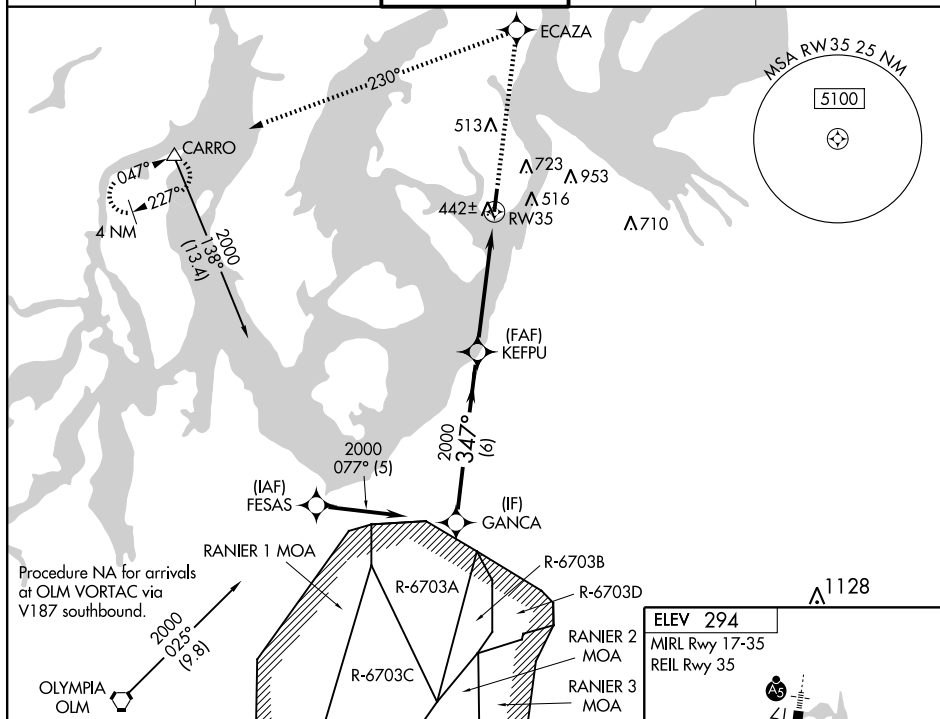
# RNAV (GPS) RWY 35

## TACOMA NARROWS (TIW)

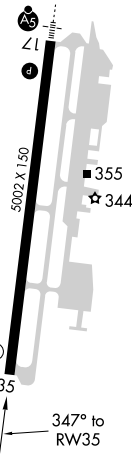
▼ Baro-VNAV NA when using McChord Field altimeter setting.  
 ▲ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.  
 Visibility reduction by helicopters NA. Circling NA east of Rwy 17-35.  
 When local altimeter setting not received, use McChord Field altimeter setting and increase all DA 25 feet and all MDA 40 feet.

MISSED APPROACH: Climb to 4000 direct ECAZA and left turn via 230° track to CARRO and hold, continue climb-in-hold to 4000.

ATIS <b>124.05</b>	SEATTLE APP CON <b>120.1 290.9</b>	TACOMA TOWER ★ <b>118.5 (CTAF) 0 253.5</b>	GND CON <b>121.8</b>	UNICOM <b>122.95</b>
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ELEV 294  
MIRL Rwy 17-35  
REIL Rwy 35



CATEGORY	A	B	C	D
LPV DA	560-1	266 (300-1)		
LNAV/VNAV DA	768-1¾	474 (500-1¾)		
LNAV MDA	840-1 546 (600-1)	840-1½ 546 (600-1½)	840-1¾ 546 (600-1¾)	
CIRCLING	980-1 686 (700-1)	980-2 686 (700-2)	980-2¼ 686 (700-2¼)	

LOC/DME I-VDG <b><u>111.3</u></b> Chn <b>50</b>	APP CRS <b>099°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>25</b>
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**LDA-A**  
VANCOUVER/PEARSON FIELD (VUO)

**T**  
**A**<sub>NA</sub> Use Portland Intl altimeter setting.

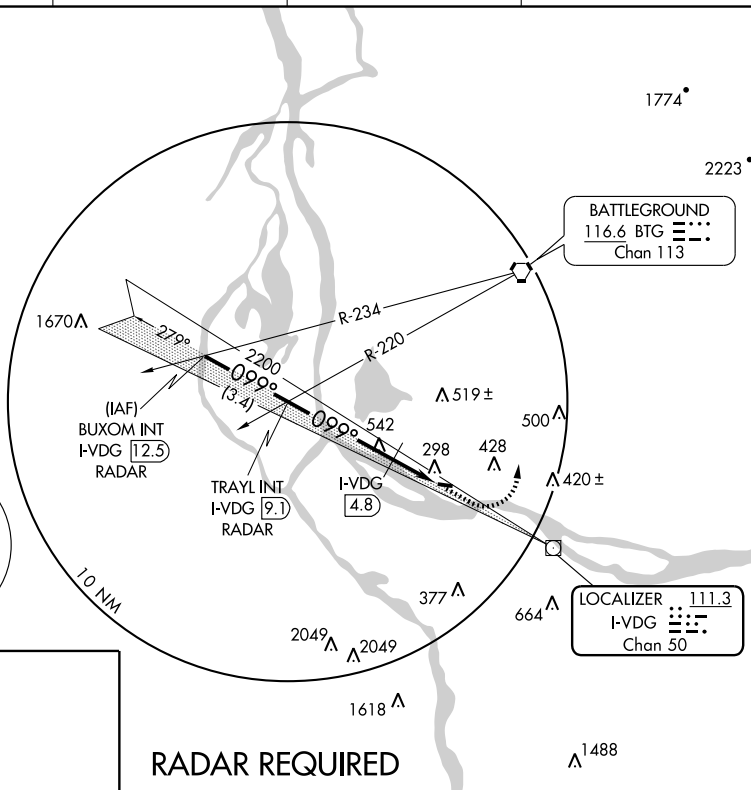
**MISSED APPROACH:** Climb to 900 then climbing left turn to 4000 direct to BTG VORTAC.

ASOS  
135.125

PORTLAND APP CON  
124.35 299.2

CLNC DER  
**121.65**

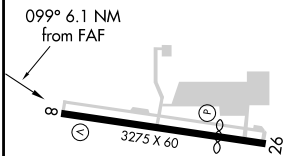
UNICOM  
123.0 (CTAF) **L**



## RADAR REQUIRED

ELEV	25	D
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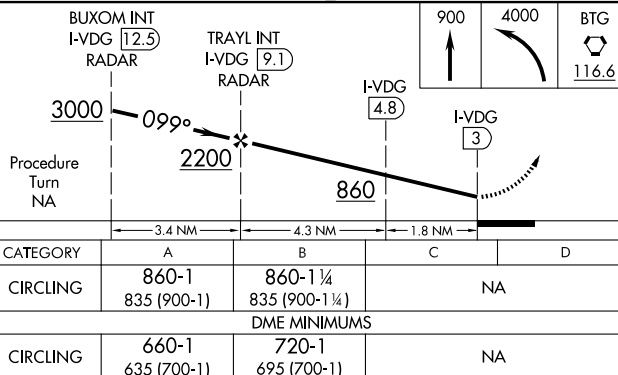
**D**



REIL Rwy 8 and 26  
MIRL Rwy 8-26 **L**

FAF to MAP 6.1 NM

Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02



VANCOUVER, WASHINGTON

Orig 09015

VANCOUVER/PEARSON FIELD (VUO)

45°37'N-122°39'W

## LDA-A

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

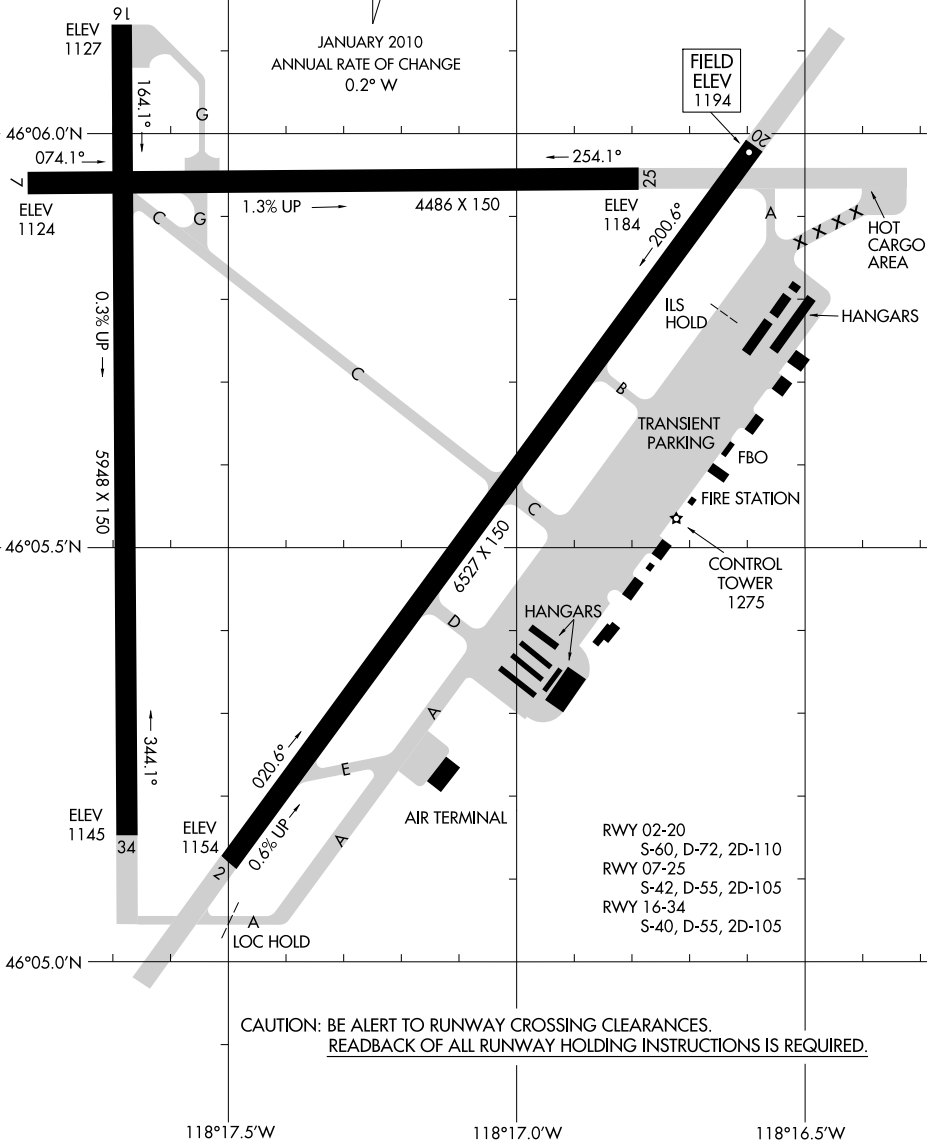
## AIRPORT DIAGRAM

AL-440 (FAA)

WALLA WALLA RGNL (ALW)  
WALLA WALLA, WASHINGTON

ASOS  
135.875  
WALLA WALLA TOWER ★  
118.5 289.4  
GND CON  
121.6 289.4

JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.2° W



NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

## AIRPORT DIAGRAM

WALLA WALLA, WASHINGTON  
WALLA WALLA RGNL (ALW)

## WALLA WALLA

PAGE (9W2) 2 S UTC-8(-7DT) N46°00.99' W118°22.23'

SEATTLE

800 NOTAM FILE SEA

RWY 09-27: 2000X25 (TURF)

RWY 09: Hill. Rgt tfc.

RWY 27: P-line.

AIRPORT REMARKS: Unattended.

COMMUNICATIONS: CTAF 122.9

WALLA WALLA RGNL (ALW) 3 NE UTC-8(-7DT) N46°05.69' W118°17.34'

SEATTLE

1194 B S4 FUEL 100LL, JET A OX 2 Class I, ARFF Index A NOTAM FILE ALW

H-1C, L-13A

RWY 02-20: H6527X150 (ASPH-GRVD) S-60, D-72, 2D-110 HIRL 0.6% up NE

IAP, AD

RWY 02: REIL, PAPI(P4L)—GA 3.0° TCH 45'.

RWY 20: MALSR. PAPI(P4L)—GA 3.0° TCH 50'.

RWY 16-34: H5948X150 (ASPH-CONC) S-40, D-55,  
2D-105 0.3% up SE

RWY 16: Ground.

RWY 07-25: H4486X150 (ASPH-CONC) S-42, D-55,  
2D-105 1.3% up E.

AIRPORT REMARKS: Attended 1430-0300Z†. Self svc credit card fueling facility located 600' N of tower. For svc after hours call 509-529-4243. ARFF services avbl during scheduled air carrier opr. CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR call arpt manager 509-525-3100. Rwy 07-25 CLOSED to scheduled air carrier opr. Rwy 16-34 CLOSED to scheduled air carrier opr. Rwy 07-25 large cracks and surface variations may impair directional control. Rwy 16-34 large cracks and surface variations. When twr clsd ACTIVATE MALSR Rwy 20, REIL Rwy 02, HIRL Rwy 02-20 and PAPI Rwy 02 and Rwy 20—CTAF.

WEATHER DATA SOURCES: ASOS 135.875 (509) 525-3014.

COMMUNICATIONS: CTAF 118.5

RCO 122.3 (SEATTLE RADIO)

® CHINOOK APP/DEP CON 133.15 (1400-0600Z†).

® SEATTLE CENTER APP/DEP CON 132.6 (0600-1400Z†).

TOWER 118.5 (1430-0300Z†) GND CON 121.6

AIRSPACE: CLASS D svc 1430-0300Z† other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE ALW.

(L) VORW/DME 116.4 ALW Chan 111 N46°05.22' W118°17.55' at fld. 1179/20E.

VOR/DME portions unusable:

010°-065° byd 31 NM blo 12,500'

095°-140° byd 20 NM blo 13,500'

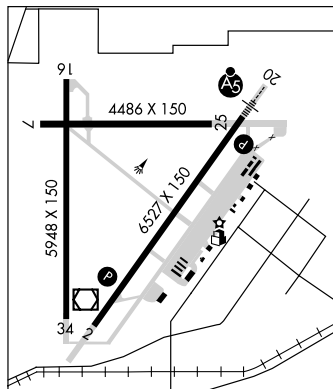
065°-095° byd 20 NM blo 14,500'

DME portion unusable: 140°-145° byd 20 NM blo 11,500'

TRINA NDB (LOM) 353 AL N46°10.53' W118°11.78' 199° 6.2 NM to fld.

LS 111.7 I-ALW Rwy 20. Class IE. LOM TRINA NDB.

COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not avbl at twr.



WALLULA N46°01.36' W118°51.52'

SEATTLE

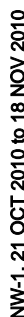
RCO 122.6 (MC MINNVILLE RADIO)

L-13A

ILS or LOC/DME Z RWY 20  
WALLA WALLA RGNL (ALW)

**MISSED APPROACH:** Climb to 1600 then climbing right turn to 4000 heading 340° and ALW VOR/DME R-308 to BACUN INT/ALW 15.1 DME and hold.

GND CON  
121.6 289.4



1600 ↑	4000 hdg 340°	ALW R-308	BACUN △	TRINA ALW (6.7)	LOM	ZALBI ALW (8.7)	RIRRO ALW (12.3)
<p>*2320 when using Pendleton altimeter setting.</p> <p>*LOC only</p>							
CATEGORY	A	B	C	D			
S-ILS 20	#1394/24 200 (200-½)						
S-LOC 20	1980/24 786 (800-½)	1980/40 786 (800-¾)	1980-1¾ 786 (800-1¾)	1980-2			
CIRCLING	1980-1 786 (800-1)	1980-1¼ 786 (800-1¼)	1980-2¼ 786 (800-2¼)	1980-2½ 786 (800-2½)			

WALLA WALLA RGNL (ALW)

ILS or LOC/DME Z RWY 20

ILS or LOC Y RWY 20  
WALLA WALLA RGNL (ALW)

MALSP

**MISSED APPROACH:** Climb to 1600 then climbing right turn to 4000 heading 340° and ALW VOR/DME R-308 to BACUN INT/ALW 15.1 DME and hold.

ASOS 135.875	CHINOOK APP CON ★ 133.15 379.15	WALLA WALLA TOWER ★ 118.5 (CTAF) 0 289.4	GND CON 121.6 289.4
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Procedure NA for arrivals at RENO on V536 and V187 northeast bound.

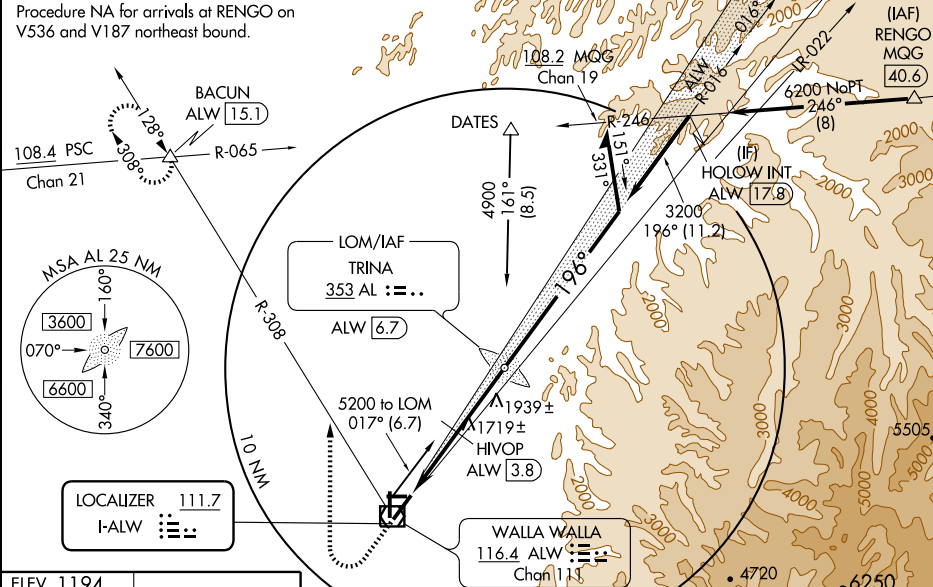


Diagram illustrating the FAF to MAP 5.7 NM segment of the approach. Key features include:

- Heading: 91°
- Distance: 196° 5.7 NM from FAF
- Altitude: TDZE 1194
- Obstacle: TWR 1275
- Lighting: REIL Rwy 2, HIRL Rwy 2-20
- Gradients: 1.3% UP, 0.3% UP, 0.6% UP
- Intersections: 4886 X 150, 5948 X 150, 6527 X 150

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

**LOC only**  
**\* 2320 when using Pendleton altimeter setting.**

**TRINA LOM**  
 ALW 6.7

**HIVOP**  
 ALW 3.8

**COSUV**

**2200\***

**3200**

**3800**

**016°**

**196°**

**GS 3.00°**  
**TCH 50**

**2.8 NM**

**2.9 NM**

CATEGORY	A	B	C	D
S-ILS 20		#1394/24	200 (200-1/2)	
S-LOC 20	2200/40 1006 (1100-3/4)	2200/50 1006 (1100-1)	2200-2 1/2	1006 (1100-2 1/2)
CIRCLING	2200-1 1/4 1006 (1100-1 1/4)	2200-1 1/2 1006 (1100-1 1/2)	2200-3	1006 (1100-3)

**HIVOP DME FIX MINIMUMS**

	1980/24 786 (800-1/2)	1980/40 786 (800-3/4)	1980-1 3/4 786 (800-1 1/4)	1980-2 786 (800-2)
S-LOC 20				
CIRCLING	1980-1 786 (800-1)	1980-1 1/4 786 (800-1 1/4)	1980-2 1/4 786 (800-2 1/4)	1980-2 1/2 786 (800-2 1/2)

WALLA WALLA RGNL (ALW)

ILS or LOC Y RWY 20

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010



NW-1, 21 OCT 2010 to 18 NOV 2010

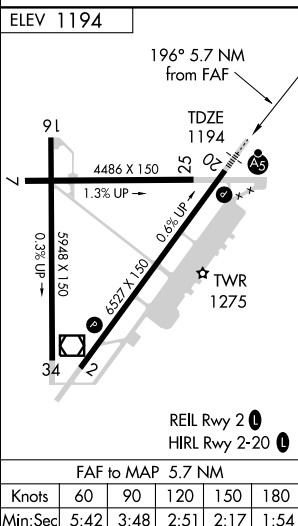
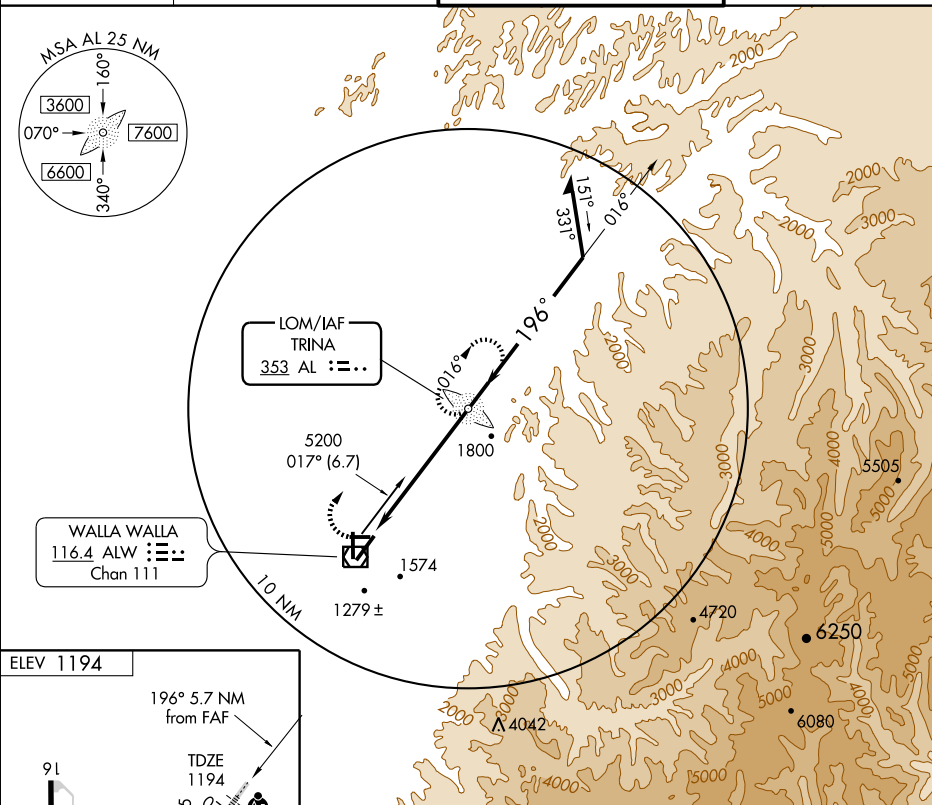
WALLA WALLA, WASHINGTON

AL-440 (FAA)

LOM AL <b>353</b>	APP CRS <b>196°</b>	Rwy Idg TDZE Apt Elev	<b>6527</b> <b>1194</b> <b>1194</b>
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**NDB RWY 20**  
WALLA WALLA RGNL (ALW)

<b>▼</b> <b>▲</b> Cat. A and B S-20 visibility increased ½ mile for inoperative ALSF-1.		<b>MALSR</b> 	<b>MISSED APPROACH:</b> Climbing right turn to 3700 direct TRINA LOM and hold.
<b>ASOS</b> <b>135.875</b>	<b>CHINOOK APP CON ★</b> <b>133.15 379.15</b>	<b>WALLA WALLA TOWER ★</b> <b>118.5 (CTAF) 0 289.4</b>	<b>GND CON</b> <b>121.6 289.4</b>



<b>3700</b> <b>AL</b> 		<b>LOM</b> <b>016°</b> <b>196°</b> <b>3200</b> <b>3800</b> Maximum procedure turn entry altitude 6000.	
<b>REIL Rwy 2 0</b> <b>HIRL Rwy 2-20 0</b>		<b>FAF to MAP 5.7 NM</b>	
<b>Categories</b>		<b>Categories</b>	
<b>S-20</b>		<b>S-20</b>	
<b>CIRCLING</b>		<b>CIRCLING</b>	

WALLA WALLA, WASHINGTON  
Amdt 5C 10266

46°06'N-118°17'W

WALLA WALLA RGNL (ALW)  
**NDB RWY 20**

NW-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH <b>72805</b> <b>W02A</b>	APP CRS <b>016°</b>	Rwy Idg <b>6527</b> TDZE <b>1173</b> Apt Elev <b>1194</b>
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## RNAV (GPS) RWY 2

WALLA WALLA RGNL (ALW)

- ▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.
- ▲** When local altimeter setting not received, use Pendeletion altimeter setting and increase all DAs/MDAs 120 feet and LPV visibilities ¼ mile, LNAV/VNAV visibilities ½ mile, LNAV Cats C/D visibility ¼ mile, and Circling Cat C/D visibility ½ mile.
- VDP and Baro-VNAV NA when using Pendeletion altimeter setting.

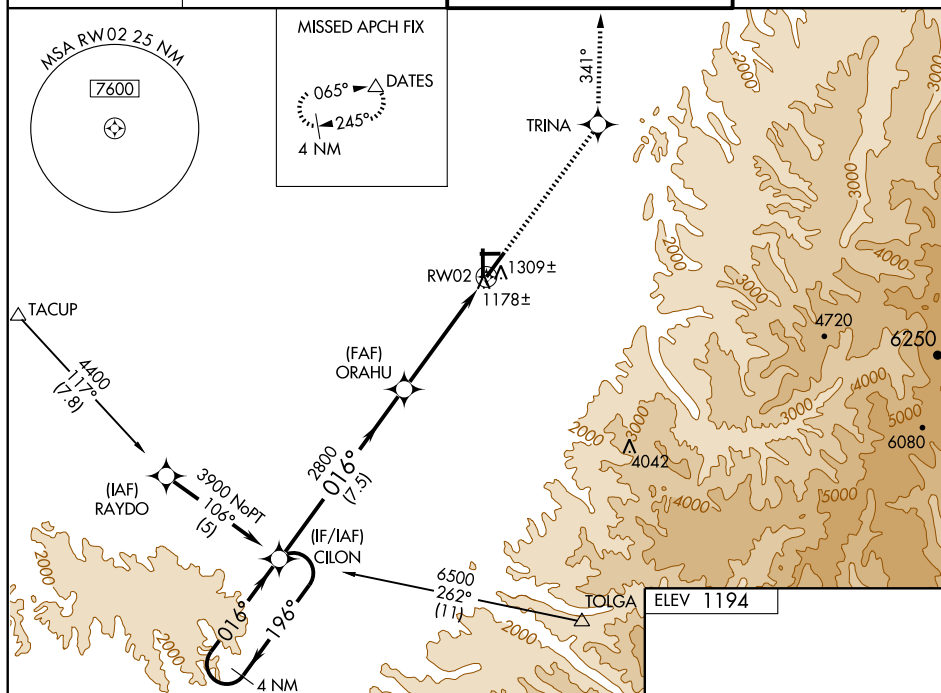
**MISSED APPROACH:** Climb to 4000 direct TRINA and via 341° track to DATES and hold.

ASOS  
135.875

CHINOOK APP CON ★  
133.15 379.15

WALLA WALLA TOWER ★  
118.5 (CTAF) 289.4

GND CON  
121.6 289.4



NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1. 21 OCT 2010 to 18 NOV 2010

4 NM Holding Pattern

CILON

ORAHU

4000

TRINA

tr 341°

DATES

3900

←196°

016°→

016°

2800

\*1.3 NM to RW02

\*RNAV only

GS 3.00°

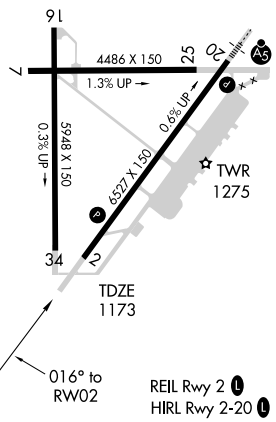
TCH 45

7.5 NM

3.7 NM

1.3

RW02



WALLA WALLA, WASHINGTON  
Amdt 1 10266

46°06'N-118°17'W

WALLA WALLA RGNL (ALW)  
RNAV (GPS) RWY 2

APP CRS **160°**  
 Rwy ldg **5948**  
 TDZE **1136**  
 Apt Elev **1194**

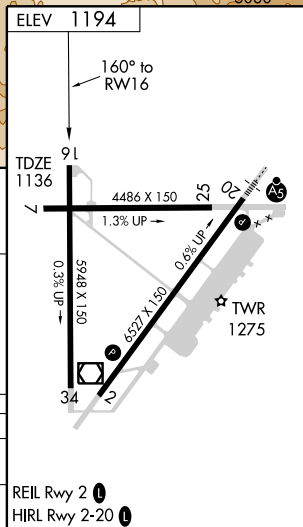
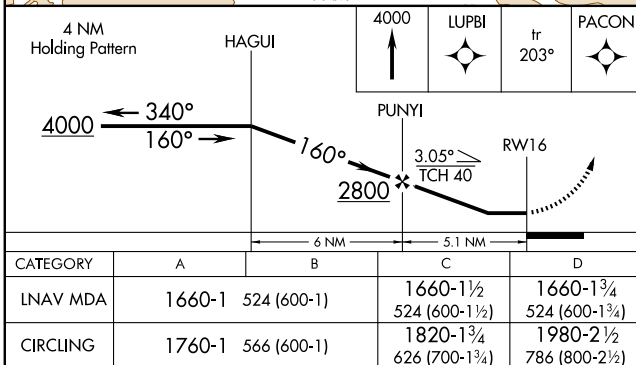
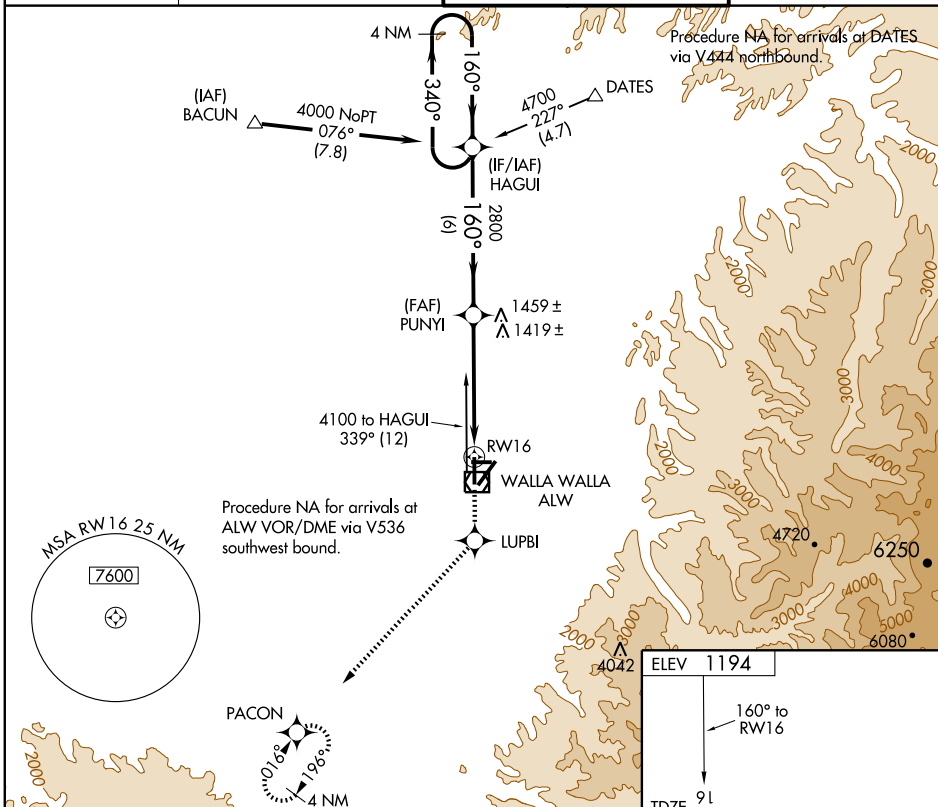
# RNAV (GPS) RWY 16

WALLA WALLA RGNL (ALW)

▼ Straight-in/circling to Rwy 16 NA at night.  
 ▲ DME/DME RNP-0.3 NA.  
 Inoperative table does not apply.

MISSED APPROACH: Climb to 4000 direct LUPBI  
 and via 203° track to PACON and hold.

ASOS <b>135.875</b>	CHINOOK APP CON ★ <b>133.15 379.15</b>	WALLA WALLA TOWER ★ <b>118.5 (CTAF) 0 289.4</b>	GND CON <b>121.6 289.4</b>
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WAAS CH <b>90299</b> <b>W20A</b>	APP CRS <b>196°</b>	Rwy Idg TDZE Apt Elev	<b>6527</b> <b>1194</b> <b>1194</b>
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# RNAV (GPS) RWY 20

## WALLA WALLA RGNL (A.L.W)

▼ DME/DME RNP-0.3 NA.  
▲ Baro-VNAV NA below -17°C (2°F).  
For inoperative MALS, increase LPV visibility all Cats to RVR 4000.

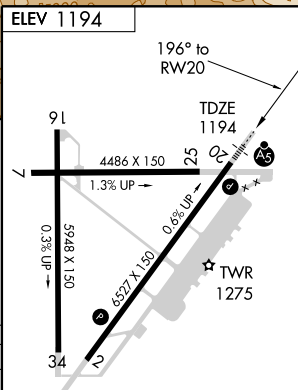
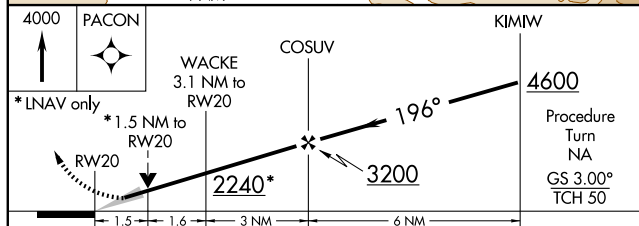
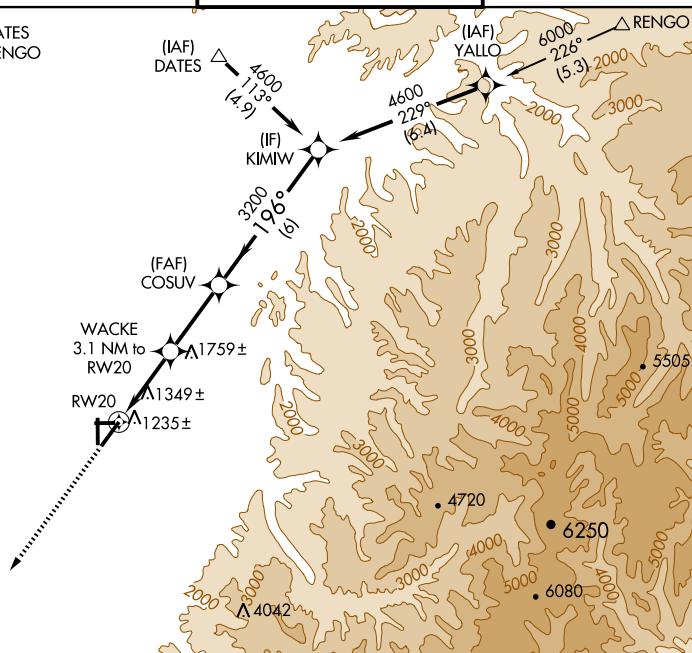
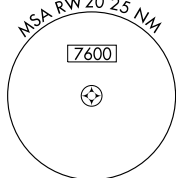
MALS



MISSED APPROACH: Climb to  
4000 direct PACON and hold.

ASOS <b>135.875</b>	CHINOOK APP CON ★ <b>133.15 379.15</b>	WALLA WALLA TOWER ★ <b>118.5 (CTAF) 0 289.4</b>	GND CON <b>121.6 289.4</b>
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Procedure NA for arrivals at DATES  
via V444 northbound and at RENG0  
via V536 northeast bound.



CATEGORY	A	B	C	D
LPV DA	1444/24 250 (300-½)			
LNAPV/ VNAV DA	1694/60 500 (500-1¼)			
LNAPV MDA	1720/24 526 (600-½)	1720/50 526 (600-1)	1720/60 526 (600-1¼)	
CIRCLING	1760-1¾ 566 (600-1¾)	1820-1¾ 626 (700-1¾)	1980-2½ 786 (800-2½)	

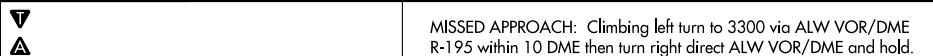
WALLA WALLA, WASHINGTON  
Orig-A 09239

46°06'N - 118°17'W

WALLA WALLA RGNL (A.L.W)  
RNAV (GPS) RWY 20

VOR/DME ALW <b><u>116.4</u></b> Chan <b>111</b>	APP CRS <b>015°</b>	Rwy Idg <b>6527</b> TDZE <b>1175</b> Apt Elev <b>1194</b>
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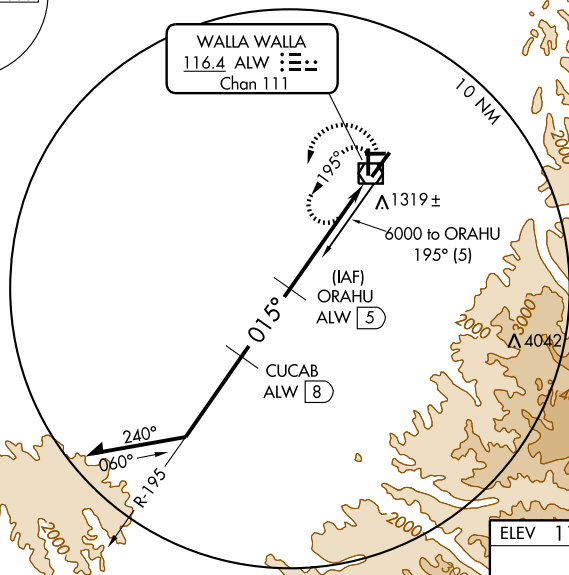
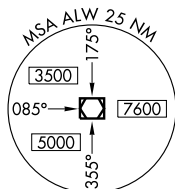
VOR/DME RWY 2  
WALLA WALLA RGNL (ALW)

ASOS  
135.875

CHINOOK APP CON ★  
133.15 379.15

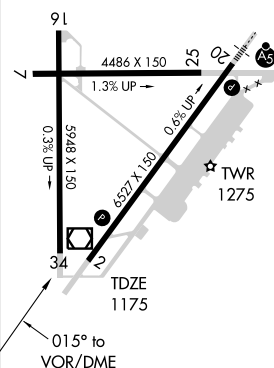
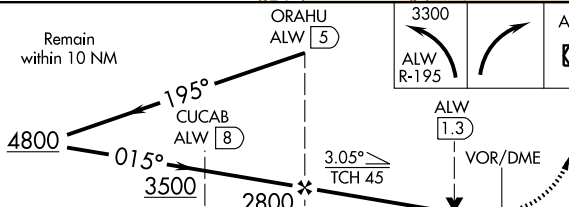
WALLA WALLA TOWER ★  
118.5 (CTAF) **L** 289.4

GND CON  
121.6 289.4



ELEV 1194

Remain  
within 10 NM



CATEGORY	A	B	C	D
S-2	1580-1	405 (400-1)	1580-1 $\frac{1}{4}$	405 (400-1 $\frac{1}{4}$ )
CIRCLING	1760-1	566 (600-1)	1820-2 $\frac{1}{4}$ 626 (700-1 $\frac{1}{4}$ )	1980-2 $\frac{1}{2}$ 786 (800-2 $\frac{1}{2}$ )

REIL Rwy 2 **L**  
HIRL Rwy 2-20 **L**

WALLA WALLA, WASHINGTON  
Orig-B 11FEB10

46°06'N-118°17'W

WALLA WALLA RGNL (ALW)  
VOR/DME RWY 2

NW-1. 21 OCT 2010 to 18 NOV 2010

VOR/DME ALW <b>116.4</b> Chan <b>111</b>	APP CRS <b>154°</b>	Rwy Idg TDZE Apt Elev	<b>5948</b> <b>1136</b> <b>1194</b>
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# VOR RWY 16

WALLA WALLA RGNL (ALW)

▼  
▲ NA

Straight-in/circling to Rwy 16 NA at night.  
Inoperative table does not apply.

MISSED APPROACH: Climbing right turn to 3000  
via ALW VOR/DME R-195 within 10 DME then  
right turn direct ALW VOR/DME and hold.

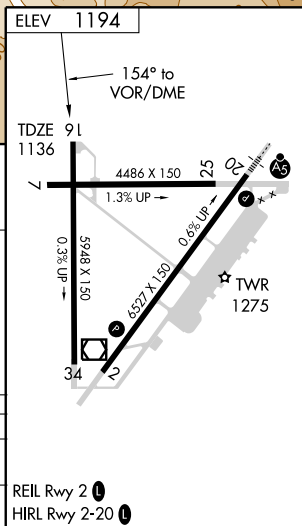
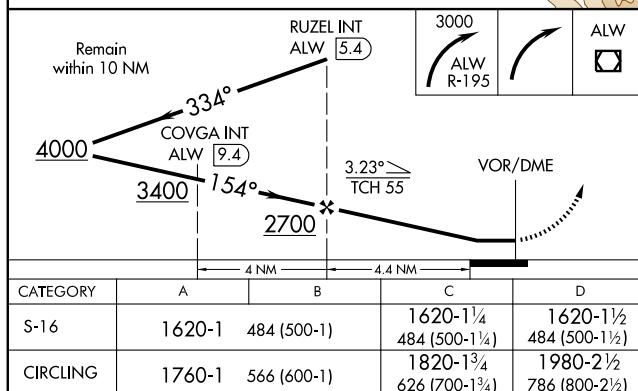
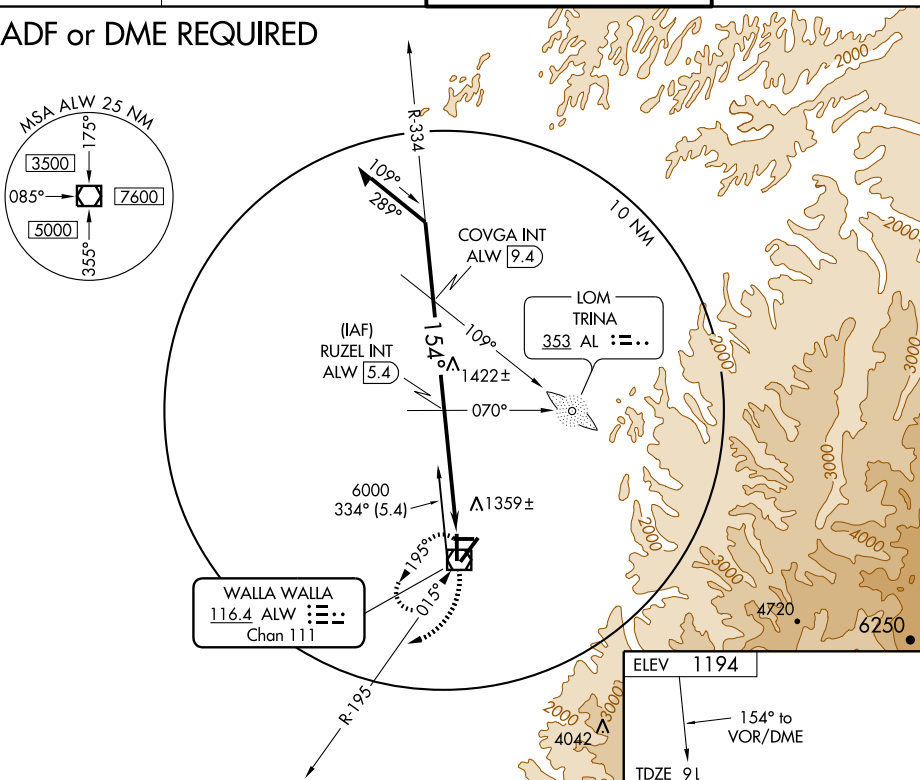
ASOS  
**135.875**

CHINOOK APP CON ★  
**133.15 379.15**

WALLA WALLA TOWER ★  
**118.5 (CTAF) 0 289.4**

GND CON  
**121.6 289.4**

## ADF or DME REQUIRED



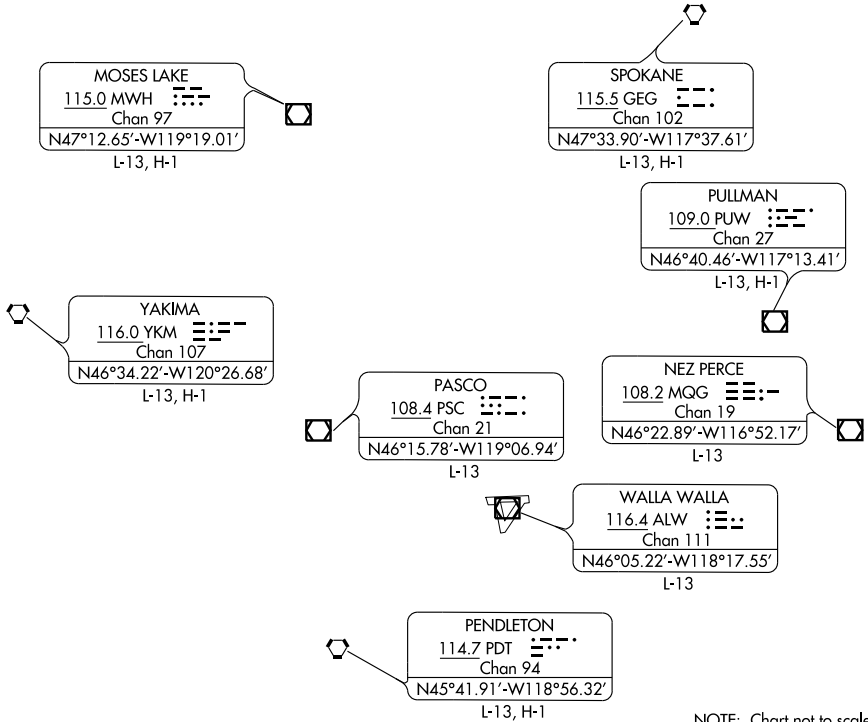
(WALLA1.WALLA) 09127

# WALLA WALLA ONE DEPARTURE

SL-440 (FAA)

WALLA WALLA RGNL (ALW)  
WALLA WALLA, WASHINGTON

WALLA WALLA GND CON  
121.6 289.4  
WALLA WALLA TOWER \*  
118.5 (CTAF) 289.4  
CHINOOK APP CON \*  
133.15 379.15



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via specified turn and heading for vector to assigned route.

LOST COMMUNICATIONS: If not in contact with Departure Control after reaching 2500' continue climb to assigned altitude and proceed direct to ALW VOR/DME, thence via assigned route.

Note: Air Traffic Control may assign turns and magnetic headings of 195° clockwise through 020° in the initial clearance.

WALLA WALLA ONE DEPARTURE

(WALLA1.WALLA) 09127

WALLA WALLA, WASHINGTON  
WALLA WALLA RGNL (ALW)

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

**WENATCHEE****PANGBORN MEM** (EAT) 4 E UTC-8(-7DT) N47°23.89' W120°12.34'

SEATTLE

1249 B S4 FUEL 100LL, JET A OX 1, 2 Class I, ARFF Index B NOTAM FILE EAT

H-1C, L-1D, 13A

RWY 12-30: H5700X150 (ASPH-GRVD) S-75, D-100, 2S-97, 2D-250 MIRL

IAP

RWY 12: REIL. PAPI(P4L)—GA 3.6° TCH 50'. Road. Rgt tfc.

RWY 30: RAIL, REIL. PAPI(P2L)—GA 4.3° TCH 45'.

RWY 07-25: H4460X75 (ASPH) S-50, D-77, 2S-97, 2D-136

1.0% up SE

RWY 07: Tree. Rgt tfc.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 07: TORA-4460 TODA-4460 ASDA-4460 LDA-4460

RWY 12: TORA-5700 TODA-5700 ASDA-5700 LDA-5700

RWY 25: TORA-4460 TODA-4460 ASDA-4460 LDA-4460

RWY 30: TORA-5700 TODA-5700 ASDA-5700 LDA-5700

**AIRPORT REMARKS:** Attended continuously. Rwy 07-25 CLOSED to all night operations. CLOSED to air carrier operations. Rwy 07-25 has extensive cracks, vegetation, and surface deterioration. Rwy 12 preferred no wind rwy. 24 hr PPR for unscheduled air carrier operations with more than 30 passenger seats call arpt ops, 509-860-1852. Bird hazard. Glider activity from Mar-Nov. Reflectors on Twys D and F only. ACTIVATE MIRL Rwy 12-30, REIL Rwy 12 and Rwy 30—CTAF. PAPI Rwy 12 and Rwy 30 opr continuously.

**WEATHER DATA SOURCES:** ASOS 119.925 (509) 886-4226.

HIWAS 111.0 EAT.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

BADGER MOUNTAIN RCO 122.3 (SEATTLE RADIO)

WENATCHEE RCO 122.6 (SEATTLE RADIO)

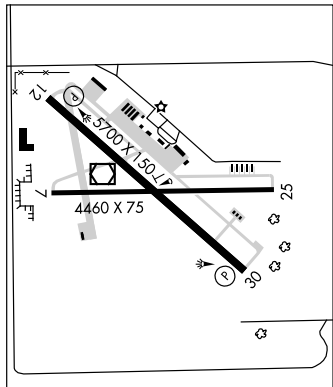
SEATTLE CENTER APP/DEP CON 126.1

**RADIO AIDS TO NAVIGATION:** NOTAM FILE EAT.

WENATCHEE (L) VOR/WME 111.0 EAT Chan 47 N47°23.98' W120°12.65' at fld. 1224/19E. HIWAS.

DME unmonitored.

ILS/DME 109.35 I-ADJ Chan 30(Y) Rwy 12. LOC unusable byd 15 NM blo 5700'.

**COMM/NAV/WEATHER REMARKS:** HIWAS unavailable.**WESTPORT** (14S) 1 N UTC-8(-7DT) N46°53.82' W124°06.05'

SEATTLE

14 NOTAM FILE SEA

RWY 12-30: H2318X50 (ASPH) MIRL

RWY 12: VASI(V2L). RWY 30: VASI(V2L). Rgt tfc.

**AIRPORT REMARKS:** Unattended. Large bird nesting area adjacent to Rwy 12-30. Rwy 12-30 soft shoulders.**COMMUNICATIONS:** CTAF 122.9**WHATCOM** N48°56.72' W122°34.76' NOTAM FILE BLI

SEATTLE

(H) VORTACW 113.0 HUH Chan 77 150° 9.3 NM to Bellingham Intl. 83/20E HIWAS

H-1B, L-1E

**WHIDBEY AIR PARK** (See LANGLEY)



LOC/DME I-ADJ <b>109.35</b> Chan 30(Y)	APP CRS <b>116°</b>	Rwy Idg TDZE Apt Elev <b>5700</b> <b>1226</b> <b>1249</b>
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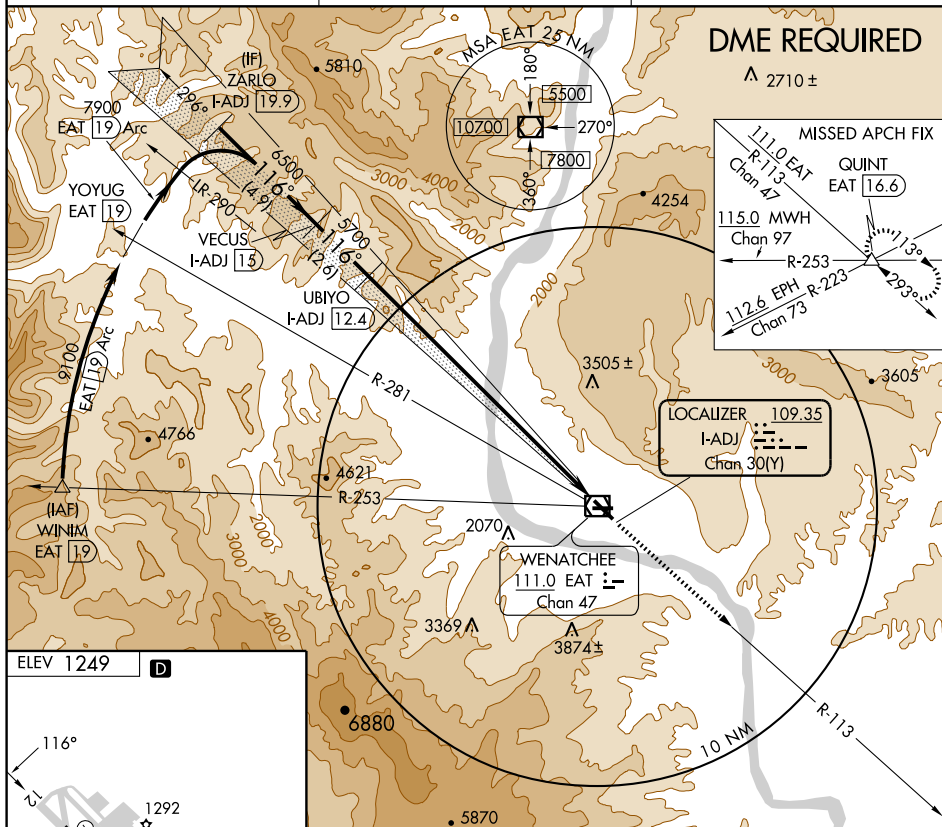
**ILS Y RWY 12**

WENATCHEE/PANGBORN MEMORIAL (EAT)

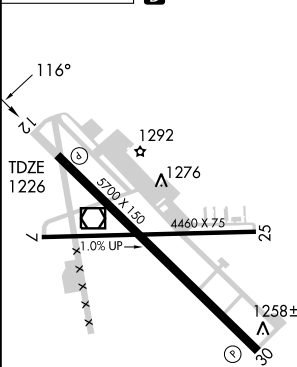


When VGSIs inoperative, procedure NA at night.

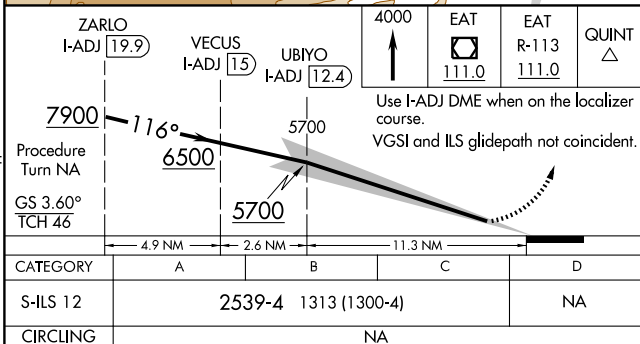
MISSED APPROACH: Climb to 4000 direct EAT VOR/DME and via EAT R-113 to QUINT INT/EAT 16.6 DME and hold.

ASOS  
**119.925**SEATTLE CENTER  
**126.1 291.6**UNICOM  
**123.0 (CTAF) 0**

ELEV 1249

**D**

RAIL Rwy 30

REIL Rwy 12 and 30 **0**MIRL Rwy 12-30 **0**

WENATCHEE, WASHINGTON

Orig 10098

WENATCHEE/PANGBORN MEMORIAL (EAT)

47°24'N-120°12'W

**ILS Y RWY 12**

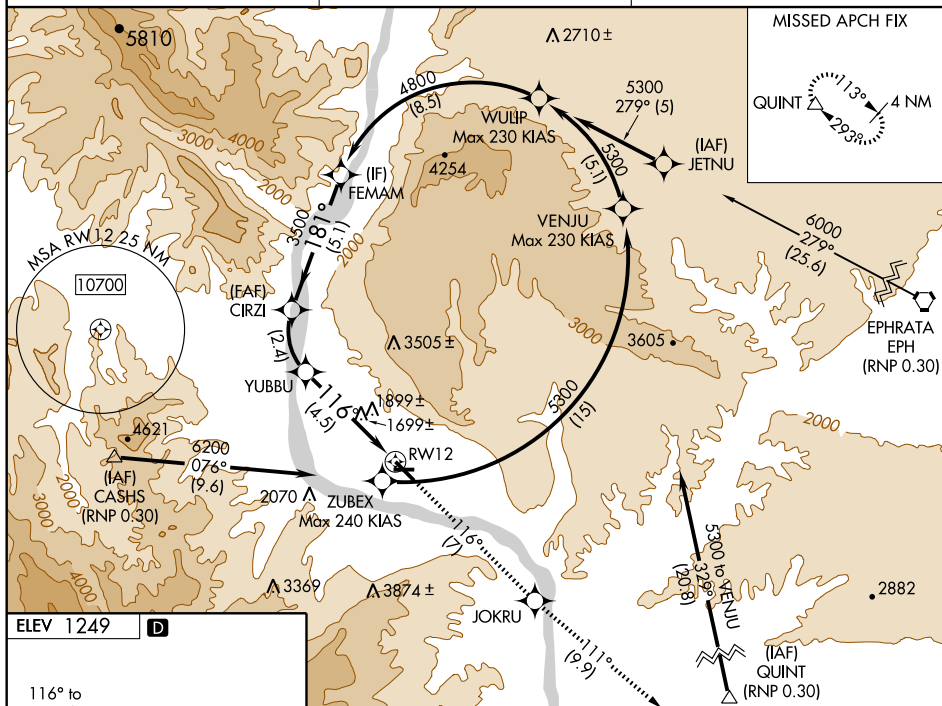
NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

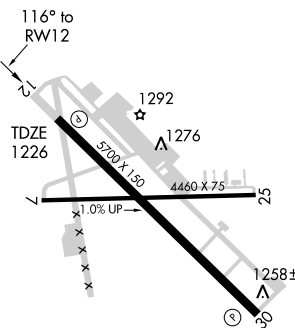
# RNAV (RNP) RWY 12

## WENATCHEE/ PANGBORN MEMORIAL (EAT)

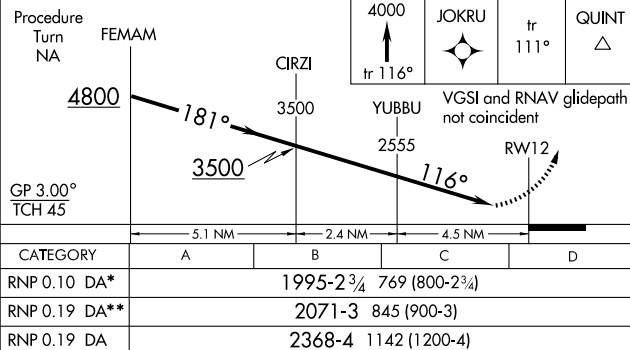
**MISSED APPROACH:** Climb to 4000 via track 116° to JOKRU and via track 111° to QUINT and hold.

UNICOM  
123.0 (CTAF) **L**

**D**



RAIL Rwy 30  
REIL Rwy 12 and 30 (L)  
MIRL Rwy 12-30 (L)



## SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

47°24'N-120°12'W

WENATCHEE/PANGBORN MEMORIAL (EAT)  
RNAV (RNP) RWY 12

VOR/DME EAT <b>111.0</b> Chan <b>47</b>	APP CRS <b>285°</b>	Rwy Idg TDZE Apt Elev <b>1249</b>	N/A N/A <b>1249</b>
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**VOR/DME-A**

WENATCHEE/PANGBORN MEMORIAL (EAT)

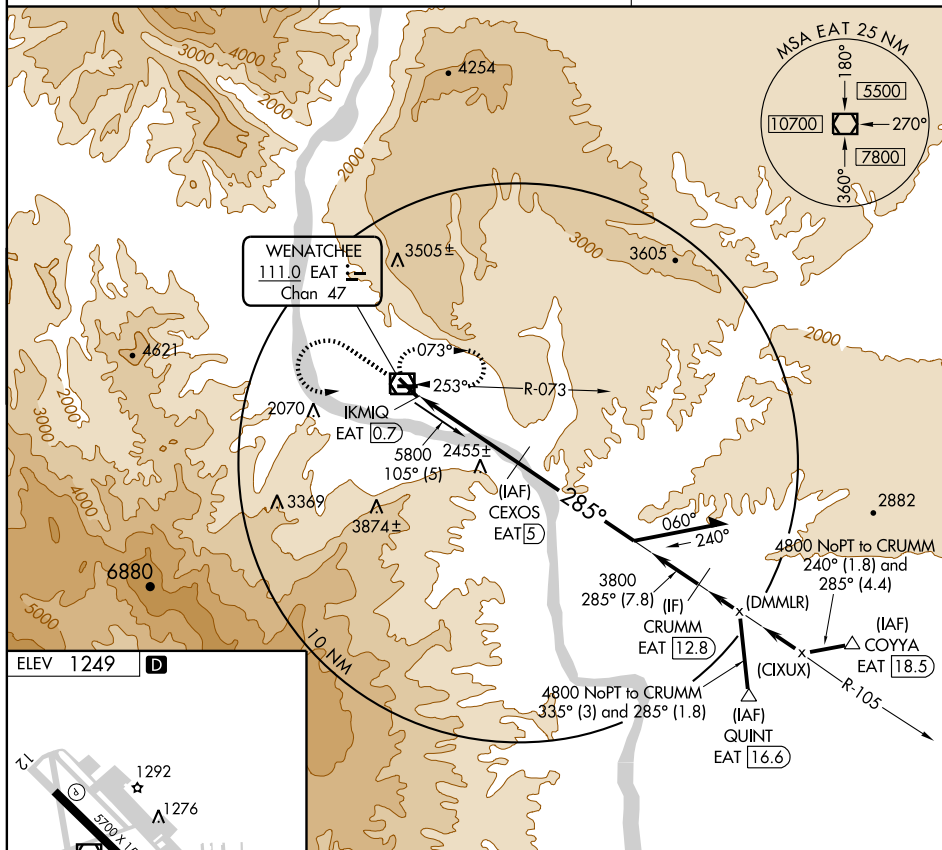
**▼** Circling NA northeast of Rwy 12-30.  
**▲** When local altimeter setting not received, use Ephrata altimeter setting and increase all MDA 80 feet.

**MISSED APPROACH:** Climb to 3900 then climbing left turn to 6000 direct EAT VOR/DME and hold, continue climb-in-hold to 6000.

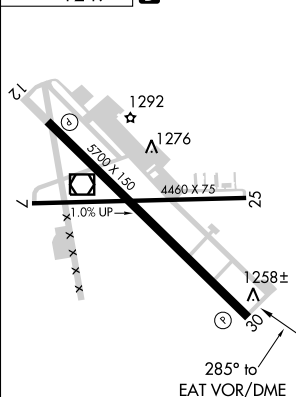
ASOS  
**119.925**

SEATTLE CENTER  
**126.1 291.6**

UNICOM  
**123.0 (CTAF) 0**



ELEV **1249** **D**



RAIL Rwy 30  
 REIL Rws 12 and 30 **0**  
 MRL Rwy 12-30 **0**

WENATCHEE, WASHINGTON  
 Amdt 8 17DEC09

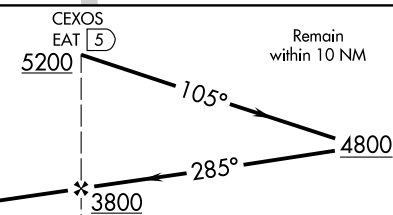
3900 6000 EAT  
**111.0**

VOR/DME

IKMIQ  
EAT **0.7**

4.3 NM

CATEGORY	A	B	C	D
CIRCLING	3180-1¼ 1931 (2000-1¼)	3180-1½ 1931 (2000-1½)	3180-3 1931 (2000-3)	



WENATCHEE/PANGBORN MEMORIAL (EAT)

**VOR/DME-A**

47°24'N-120°12'W

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME EAT  
**111.0**  
Chan **47**

APP CRS  
**100°**

Rwy Ldg  
TDZE  
Apt Elev  
**N/A**  
**1249**

**VOR/DME-C**

WENATCHEE / PANGBORN MEMORIAL (EAT)



Circling NA northeast of Rwy 12-30.

When local altimeter setting not received, use Ephrata altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climb to 5000 via EAT VOR/DME R-105 then climbing left turn to 7500 direct EAT VOR/DME and hold, continue climb-in-hold to 7500.

ASOS

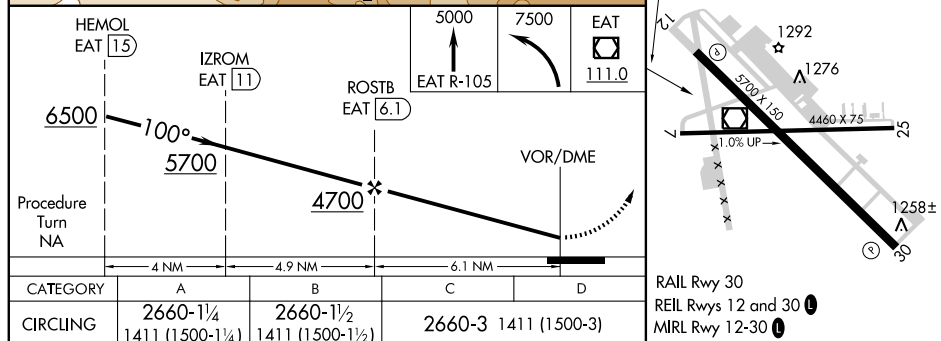
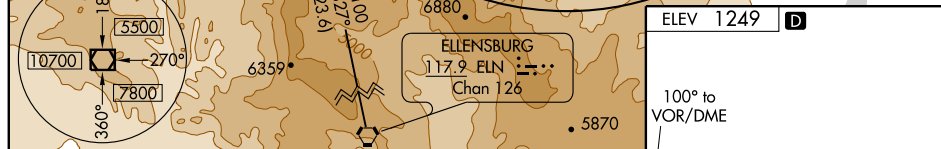
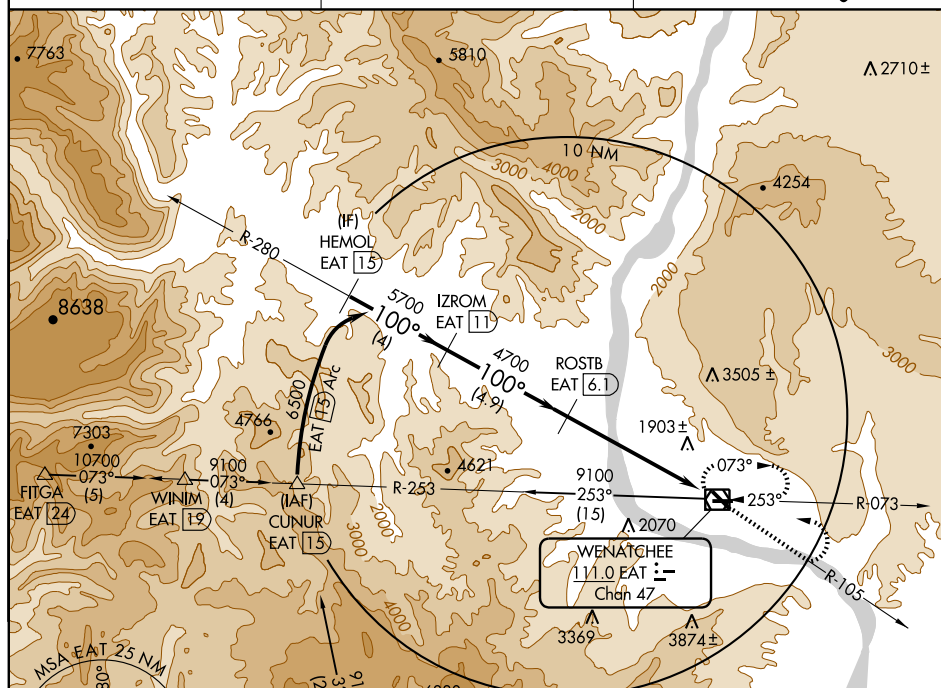
**119.925**

SEATTLE CENTER

**126.1 291.6**

UNICOM

**123.0 (CTAF) 0**



WENATCHEE, WASHINGTON

Amdt 4 17DEC09

WENATCHEE / PANGBORN MEMORIAL (EAT)

47°24'N-120°12'W

**VOR/DME-C**

NW-1, 21 OCT 2010 to 18 NOV 2010

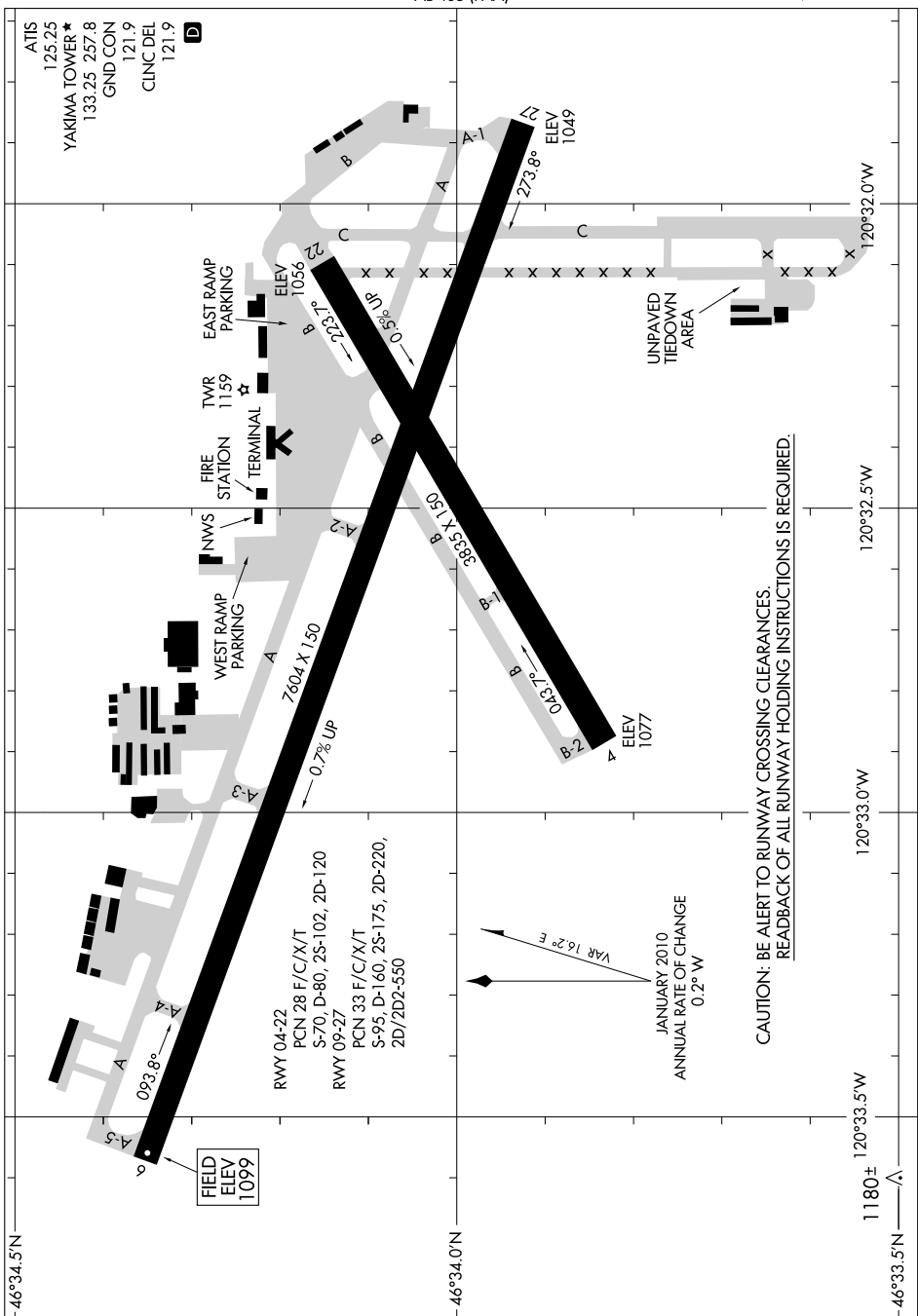
NW-1, 21 OCT 2010 to 18 NOV 2010

## AIRPORT DIAGRAM

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)  
AL-465 (FAA)

YAKIMA, WASHINGTON

NW-1, 21 OCT 2010 to 18 NOV 2010



NW-1, 21 OCT 2010 to 18 NOV 2010

## AIRPORT DIAGRAM

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)  
YAKIMA, WASHINGTON

**YAKIMA AIR TERMINAL/MCALLISTER FLD**

(YKM)(KYKM) P 3 S UTC-8(-7DT)

**SEATTLE**

N46°34.09' W120°32.64'

**H-1C, L-13A**

1099 B S4 FUEL 100LL, JET A OX 1, 3 Class I, ARFF Index A NOTAM FILE YKM

**IAP, DIAP, AD****RWY 09-27:** H7604X150 (ASPH-PFC) S-95, D-160, 2S-175, 2D-220, 2D/2D2-550 PCN 33 F/C/X/T

HIRL 0.7% up W

**RWY 09:** REIL. VASI(V4L)—GA 3.0° TCH 50'.**RWY 27:** MALSR. PAPI(P4L)—GA 3.0° TCH 59'. Road.**RWY 04-22:** H3835X150 (ASPH-PFC) S-70, D-80, 2S-102, 2D-120 PCN 28 F/C/X/T MIRL 0.5% up SW**RWY 04:** REIL. PAPI(P4L)—GA 3.0° TCH 50'.**RWY 22:** REIL. PAPI(P4L)—GA 3.03° TCH 47'.**RUNWAY DECLARED DISTANCE INFORMATION****RWY 04:** TORA-3835 TODA-3835 ASDA-3835 LDA-3835**RWY 09:** TORA-7604 TODA-7604 ASDA-7604 LDA-7604**RWY 22:** TORA-3835 TODA-3835 ASDA-3835 LDA-3835**RWY 27:** TORA-7604 TODA-7604 ASDA-7604 LDA-7604

**AIRPORT REMARKS:** Attended continuously. Be alert: Birds in/of Yakima River 5 NM east of approach to Rwy 27. Rwy 04-22 some spalling and raveling. PPR for unscheduled air carrier ops with more than 30 passenger seats, call arpt manger 509-575-6149/6014. Twy B from approach end of Rwy 22 to Twy A rstd to acft with wingspans 79' or less. When twr clsd ACTIVATE HIRL Rwy 09-27 and MALSR Rwy 27—CTAF.

**WEATHER DATA SOURCES:** ASOS (509) 248-1502.**COMMUNICATIONS:** CTAF 133.25 ATIS 125.25 UNICOM 122.95

RCO 122.5 (SEATTLE RADIO)

**CHINOOK APP/DEP CON** 123.8 263.15 (1400-0600Z‡) **SEATTLE CENTER APP/DEP CON** 132.6 269.35 (0600-1400Z‡)**TOWER** 133.25 (1400-0600Z‡) **GND CON** 121.9 **CLNC DEL** 121.9**AIRSPACE:** CLASS D svc 1400-0600Z‡ other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE YKM.**(H) VORTACW** 116.0 YKM Chan 107 N46°34.21' W120°26.68' 247° 4.1 NM to fld. 984/21E.

VOR portion unusable:

350°-080° byd 25 NM blo 9,000'

109°-135° byd 25 NM blo 6,000'

025°-035° byd 5 NM blo 6,000'

135°-180° byd 30 NM blo 7,500'

080°-105° byd 35 NM blo 6,000'

195°-225° byd 30 NM blo 8,500'

105°-107° byd 25 NM blo 6,000'

305°-335° byd 30 NM blo 9,000'

DME unusable:

095°-115° byd 26 NM blo 8,000'

207°-230° byd 20 NM blo 10,000'

095°-115° byd 35 NM

290°-315° byd 20 NM blo 11,000'

115°-207° byd 20 NM blo 8,500'

315°-080° byd 12 NM blo 15,000'

115°-207° byd 36 NM blo 10,000'

**DONNY NDB (LOM)** 371 YK N46°31.54' W120°22.33' 274° 7.6 NM to fld. Unmonitored when twr clsd.**ILS** 110.1 I-YKM Rwy 27. LOM DONNY NDB. ILS unmonitored when tower closed.**COMM/NAV/WEATHER REMARKS:** During hours twr is clsd all ops in vicinity of arpt restricted to acft with VHF radio capability, unless an emerg exist necessitating UHF equipped acft to land.

LOM YK <b><u>371</u></b>	APCH CRS <b>269°</b>	Rwy Idg <b>7604</b> TDZE <b>1068</b> Arpt Elev <b>1099</b>
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AL-465 [USA]

YAKIMA AIR TERMINAL/ MC ALLISTER FLD (KYKM)

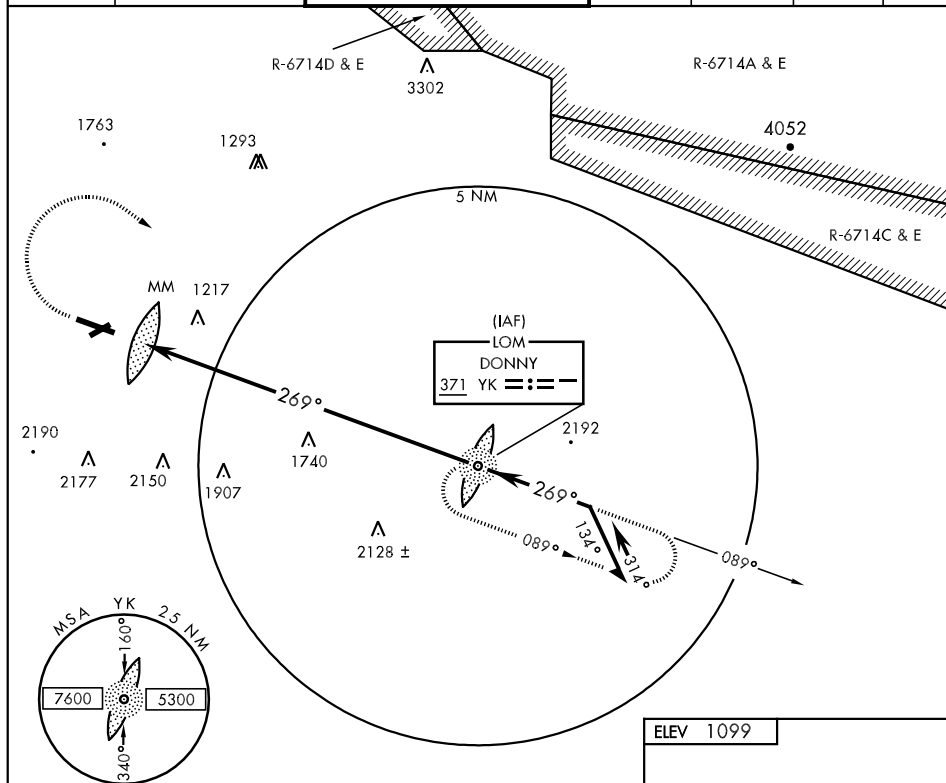


**A NA**

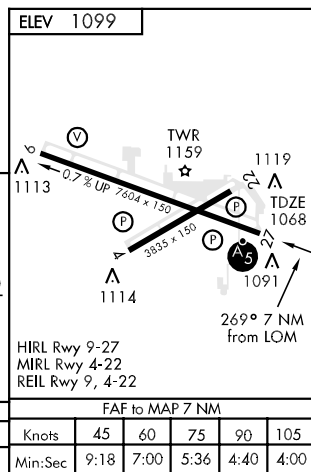
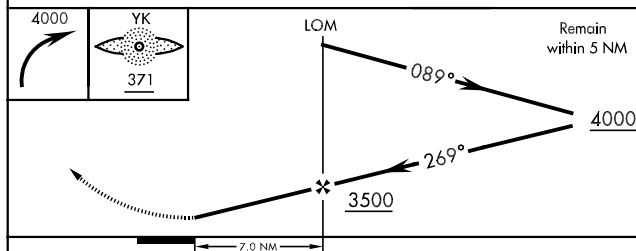


**MISSED APPROACH:** Climbing right turn to 4000 direct DONNY LOM and hold.

ATIS ★ 125.25	CHINOOK APP CON 123.8 263.15	YAKIMA TOWER ★ 133.25 (CTAF) 0 257.8	GND CON 121.9	CLNC DEL 121.9	UNICOM 122.95	ASOS
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COPTER ONLY



YAKIMA, WASHINGTON

46°34'N-120°33'W

YAKIMA AIR TERMINAL/ MC ALLISTER FLD (KYKM)

Amdt 1 10182

COPTER NDB 269°

NW-1, 21 OCT 2010 to 18 NOV 2010

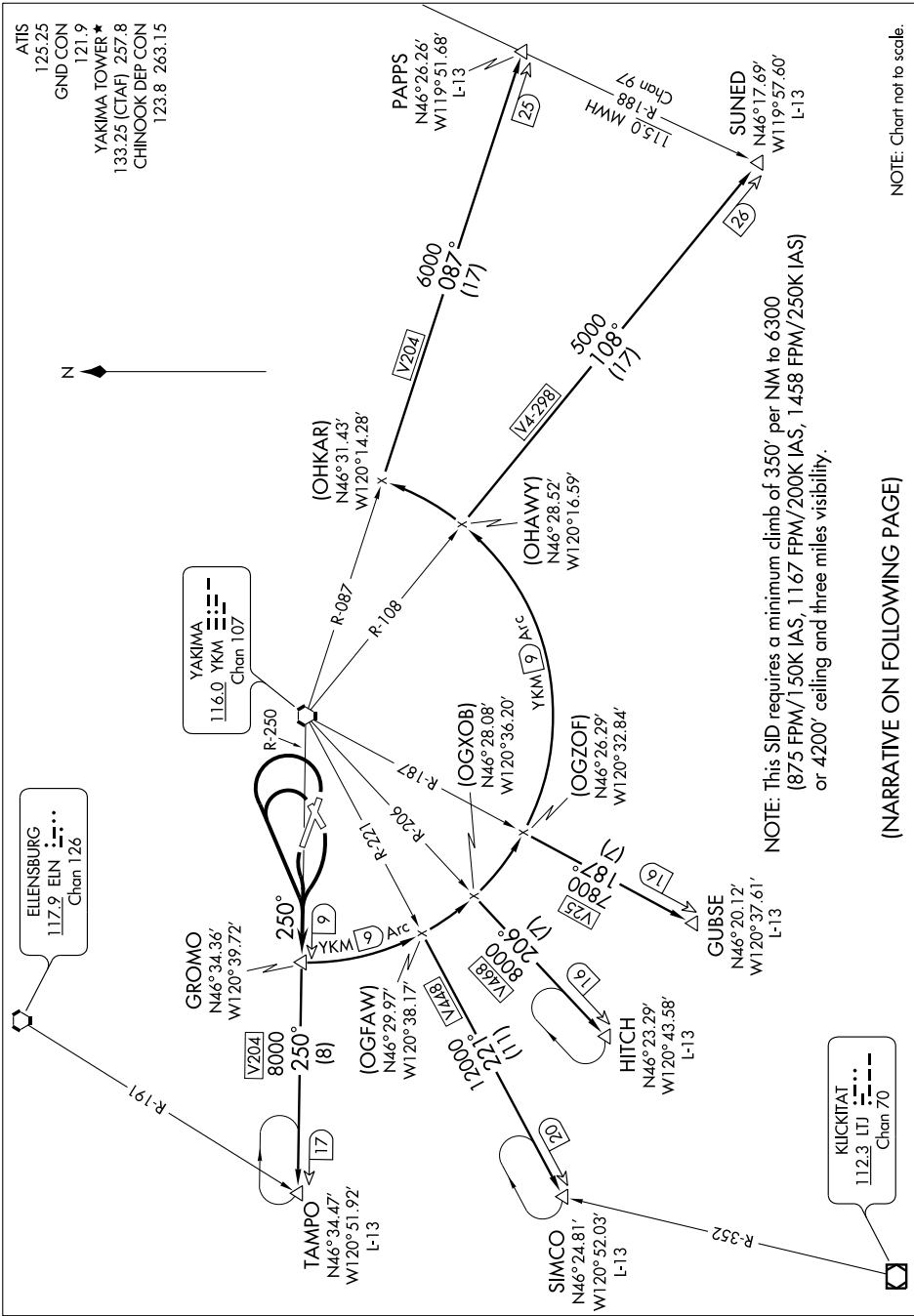
NW-1. 21 OCT 2010 to 18 NOV 2010

# GROMO TWO DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

SL-465 (FAA)

YAKIMA, WASHINGTON



# GROMO TWO DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

YAKIMA, WASHINGTON

(NARRATIVE ON FOLLOWING PAGE)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 4, 9: Turn left, thence....

TAKE-OFF RUNWAY 22: Turn right, thence....

TAKE-OFF RUNWAY 27: Climb runway heading, thence....

....Intercept and proceed via YKM R-250 to the GROMO DME Fix (YKM R-250/9), thence via (assigned transition).

GUBSE TRANSITION (GROMO2.GUBSE): From over GROMO DME Fix via 9 DME Arc and V25 to GUBSE DME Fix.

HITCH TRANSITION (GROMO2.HITCH): From over GROMO DME Fix via 9 DME Arc and V468 to HITCH DME Fix. NOTE: Climb in holding pattern NE of HITCH DME Fix, right turns, 206° inbound to 8000 feet before proceeding on course.

PAPPS TRANSITION (GROMO2.PAPPS): From over GROMO DME Fix via 9 DME Arc and V204 to PAPPS INT.

SIMCO TRANSITION (GROMO2.SIMCO): From over GROMO DME Fix via 9 DME Arc and V448 to SIMCO INT. NOTE: Climb in holding pattern NE of SIMCO INT, right turns, 221° inbound to 12000 feet before proceeding on course.

SUNED TRANSITION (GROMO2.SUNED): From over GROMO DME Fix via 9 DME Arc and V4-298 to SUNED INT.

TAMPO TRANSITION (GROMO2.TAMPO): From over GROMO DME Fix via V204 to TAMPO INT. NOTE: Climb in holding pattern east of TAMPO INT, right turns, 250° inbound to 8000' before proceeding on course.

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

LOC I-YKM <b>110.1</b>	APP CRS <b>274°</b>	Rwy Idg TDZE Apt Elev	<b>7604</b> <b>1068</b> <b>1099</b>
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## ILS Y RWY 27

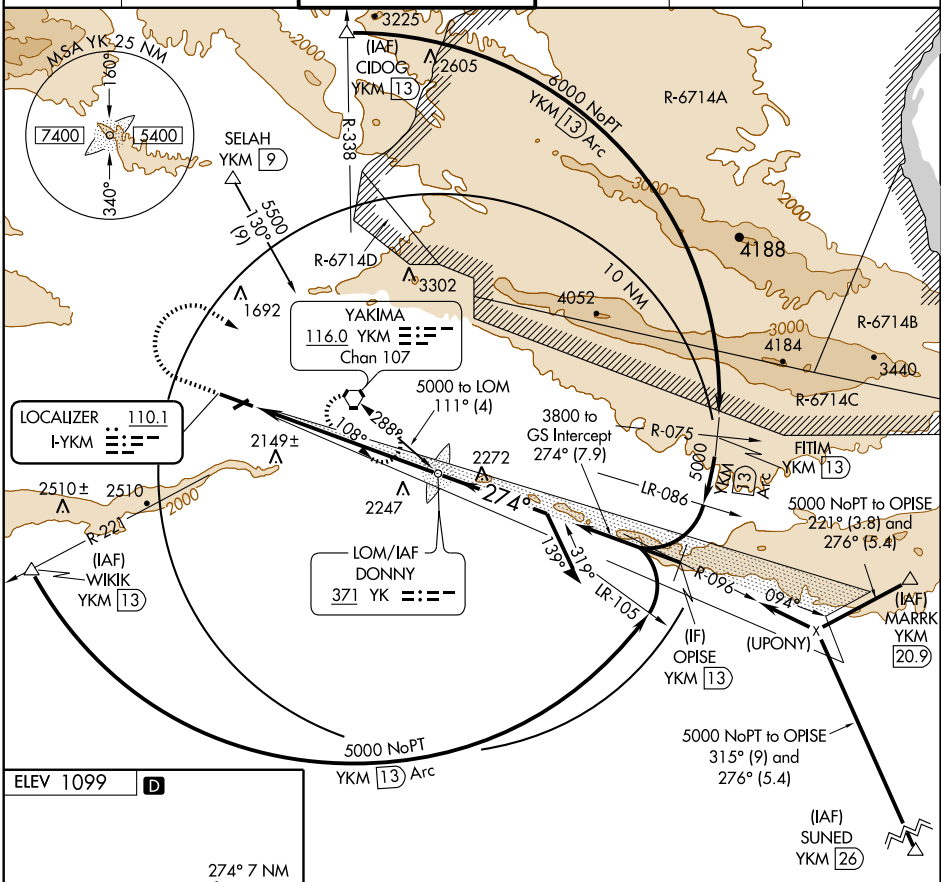
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

For inoperative MALSR, increase S-ILS 27 all Cats visibility to 2 1/4.  
When local altimeter setting not received, procedure NA.



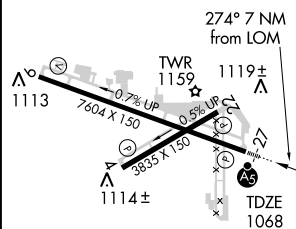
MISSED APPROACH: Climb to 2900 then climbing right turn to 4600 direct YKM VORTAC and hold, continue climb-in-hold to 4600.

ATIS <b>125.25</b>	CHINOOK APP CON* <b>123.8 263.15</b>	YAKIMA TOWER* <b>133.25 (CTAF) 0 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.9</b>	UNICOM <b>122.95</b>
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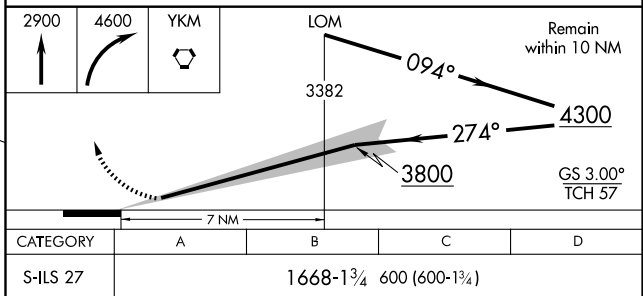


ELEV 1099

D



MIRL Rwy 4-22  
HIRL Rwy 9-27  
REIL Rws 4, 9, and 22



YAKIMA, WASHINGTON

Orig-A 29JUL10

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

46°34'N-120°33'W

## ILS Y RWY 27

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

LOC I-YKM <b>110.1</b>	APP CRS <b>274°</b>	Rwy Idg TDZE Apt Elev	<b>7604</b> <b>1068</b> <b>1099</b>
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## ILS Z RWY 27

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)



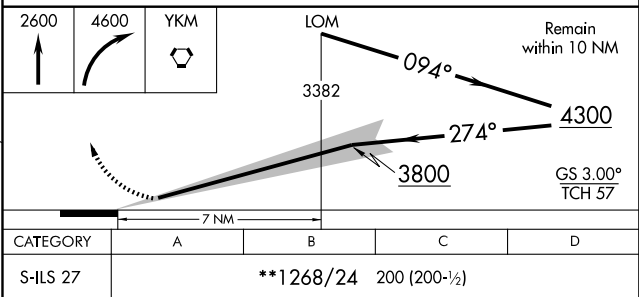
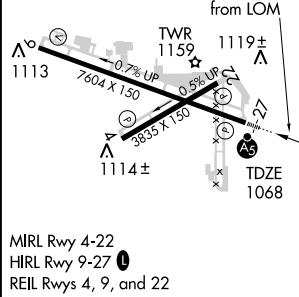
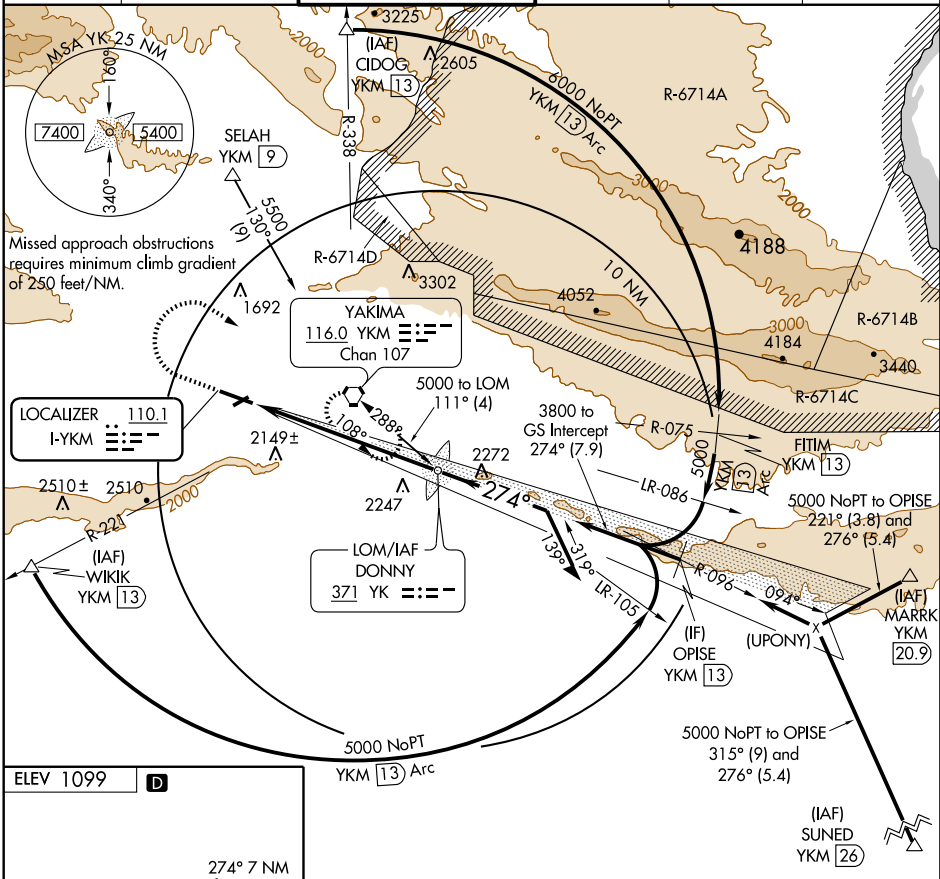
When local altimeter setting not received, procedure NA.  
 \*\*RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR



MISSED APPROACH: Climb to 2600, then  
 climbing right turn to 4600 direct YKM VORTAC  
 and hold, continue climb-in-hold to 4600.

ATIS <b>125.25</b>	CHINOOK APP CON ★ <b>123.8 263.15</b>	YAKIMA TOWER ★ <b>133.25 (CTAF) 0 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.9</b>	UNICOM <b>122.95</b>
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YAKIMA, WASHINGTON

Amdt 27A 29JUL10

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

46°34'N-120°33'W

## ILS Z RWY 27

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

LOC I-YKM <b>110.1</b>	APP CRS <b>094°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>N/A</b> <b>1099</b>	<b>N/A</b> <b>N/A</b> <b>1099</b>
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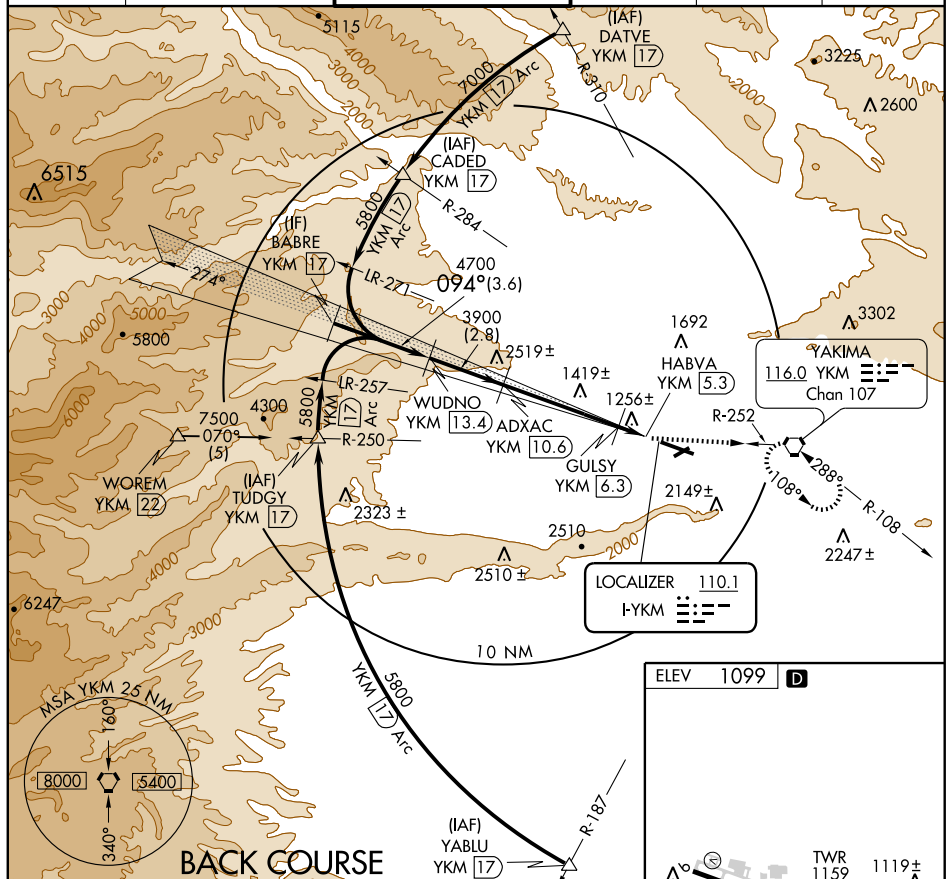
## LOC/DME BC-B

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

Simultaneous reception of I-YKM and YKM DME required.  
Circling NA south of Rwy 9-27.  
When local altimeter setting not received, procedure NA.

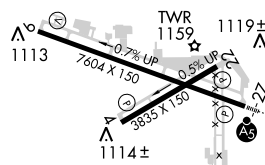
MISSED APPROACH: Climb to 4600 via  
YKM VORTAC R-252 to YKM VORTAC  
and hold, continue climb-in-hold to 4600.

ATIS <b>125.25</b>	CHINOOK APP CON ★ <b>123.8 263.15</b>	YAKIMA TOWER ★ <b>133.25 (CTAF) 0 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.9</b>	UNICOM <b>122.95</b>
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BACK COURSE

Procedure Turn NA	BABRE YKM 17	WUDNO YKM 13.4	ADXAC YKM 10.6	GULSY YKM 6.3	HABVA YKM 5.3	YKM 116.0
	5800	4700	3900	2160	1692	1419±
VGSI and descent angles not coincident.						
Disregard glide slope indications.						
3.6 NM 2.8 NM 4.4 NM 1 NM 0.6 NM						
CATEGORY	A		B		D	
CIRCLING	1760-1 661 (700-1)		1760-1¾ 661 (700-1¾)		1800-2¼ 701 (800-2¼)	

ELEV 1099 **D**

MIRL Rwy 4-22  
HIRL Rwy 9-27  
REIL Rws 4, 9, and 22

YAKIMA, WASHINGTON

Amdt 3 17DEC09

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

46°34'N-120°33'W

LOC/DME BC-B

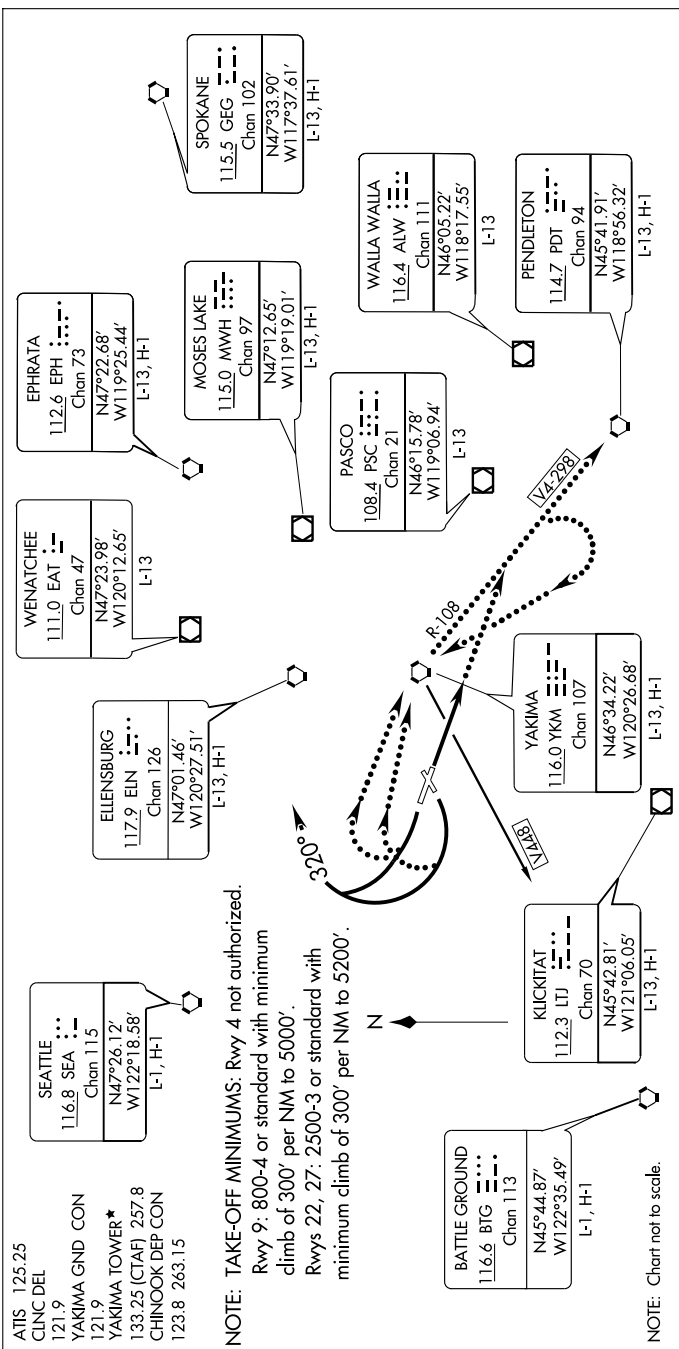
NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

(NACHS1.NACHS) 07298  
NACHES ONE DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)  
SL-465 (FAA) YAKIMA, WASHINGTON



DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RUNWAY 9:** Runway heading for vector to assigned route/fix. Thence ....  
**TAKE-OFF RUNWAY 22 and 27:** Turn right heading 320° for vector to assigned route/fix. Thence ....  
.... Maintain 10,000' or assigned lower altitude. Expect clearance to filed altitude 5 minutes after departure.  
**LOST COMMUNICATIONS:** If no transmissions are received for one minute after departure: Rwy 9 climb runway heading and outbound YKM VORTAC R-108, Rwy 22, 27, climbing right turn direct YKM VORTAC and outbound YKM VORTAC R-108, Eastbound V4-V298 climb on course, other departures continue climb on YKM R-108 until reaching assigned altitude, (southwestbound V448 continue minimum climb of 300' per NM to 9500') then climbing right turn direct YKM VORTAC. Cross YKM VORTAC at or above MEA or MCA for route of flight.

NW-1, 21 OCT 2010 to 18 NOV 2010

APP CRS  
**264°**

Rwy Idg **7604**  
TDZE **1068**  
Apt Elev **1099**

# RNAV (GPS) Y RWY 27

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

▼ When local altimeter setting not received, procedure NA. Circling NA south of Rwy 9/27. DME/DME RNP- 0.3 NA. For inoperative MALSR increase LNAV Cat A visibility to RVR 5000.

MALSR



MISSED APPROACH: Climb to 6200 direct NEXZI and right turn via track 005° to GEBTE and hold, continue climb-in-hold to 6200.

ATIS  
**125.25**

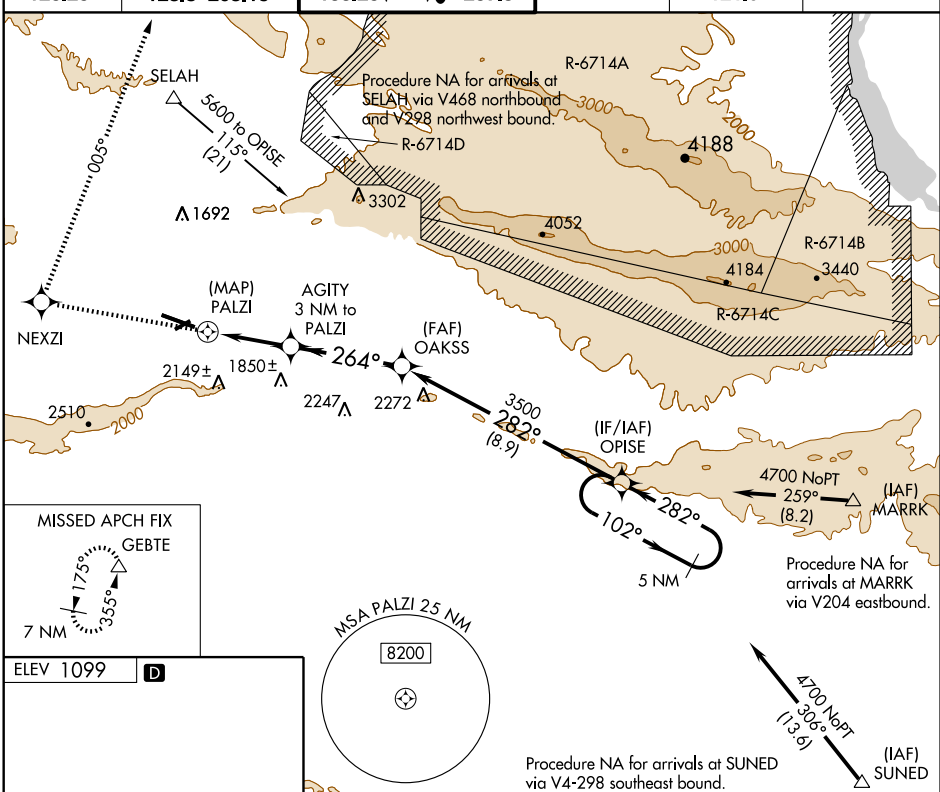
CHINOOK APP CON★  
**123.8 263.15**

YAKIMA TOWER★  
**133.25 (CTAF) 257.8**

GND CON  
**121.9**

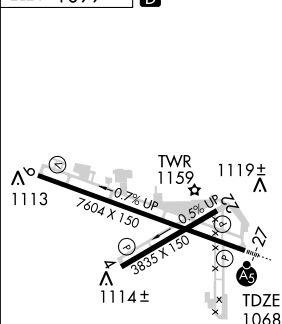
CLNC DEL  
**121.9**

UNICOM  
**122.95**



ELEV 1099

D



YAKIMA, WASHINGTON

Orig 17DEC09

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

46°34'N-120°33'W

# RNAV (GPS) Y RWY 27

NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

6200	NEXZI	GEBTE	OPISE	5 NM Holding Pattern
	trk 005°			
AGITY 3 NM to PALZI		OAKSS		
PALZI 1.9 NM to PALZI				
2200		3500		
0.5	1.9	1.1	4 NM	8.9 NM
CATEGORY	A	B	C	D
LNAV MDA	1880/40	812 (800-¾)	1880-2 812 (800-2¼)	1880-2¼ 812 (800-2¼)
CIRCLING	1880-1 781 (800-1)	1880-1¼ 781 (800-1¼)	1880-2½ 781 (800-2½)	1880-2¾ 781 (800-2¾)

# RNAV (GPS) Z RWY 27

## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

**MISSED APPROACH:** Climb to 6200 direct BOPSS and right turn via track 005° to GEBTE and hold, continue climb-in-hold to 6200.

Procedure NA for arrivals at SELAH via V468 northbound and V298 northwest bound.

R-6714D R-6714A 4188 4052 4184 3440 R-6714B R-6714C

5600 to OPSE 115° (2.1)

△ 1692 △ 3302

BOPSS RW27 △ 2149 ±

2510 2000

△ 2247 2272 RACOB 3800 274° (7.9)

(IF/IAF) OPSE 274° 094° 5 NM

4700 NoPT 259° (8.2) (IAF) MARRK

Procedure NA for arrivals at MARRK via V204 eastbound.

MISSED APCH FIX

GEBTE 175° 355° 7 NM


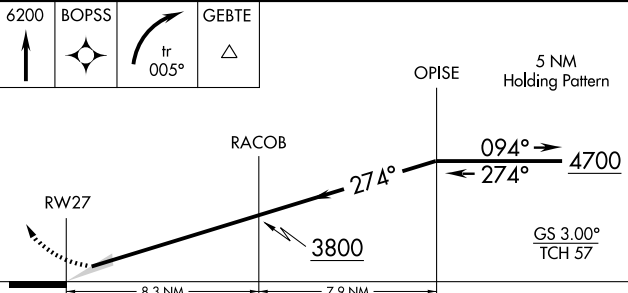
ELEV 1099 D

MSA RW27 25 NM 8200

274° to RW27

4700 NoPT 308° (13.6) (IAF) SUNED

Procedure NA for arrivals at SUNED via V4-298 southeast bound.

6200 ↑	BOPSS ✦	 tr 005°	GEBTE △			
CATEGORY	A	B	C	D		
LPV DA	1329/24		261 (300-½)			

YAKIM  
46°34'N-120°33'W

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)  
20°33'W RNAV (GPS) Z RWY 27

NW-1.21 OCT 2010 to 18 NOV 2010

VORTAC YKM <b>116.0</b> Chan <b>107</b>	APP CRS <b>251°</b>	Rwy Idg TDZE Apt Elev	N/A N/A <b>1099</b>
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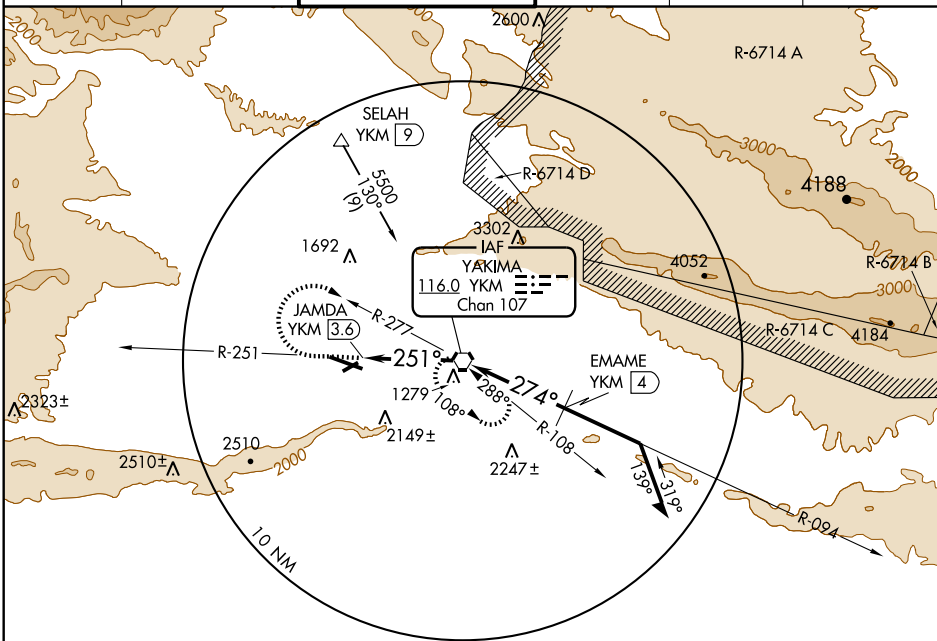
VOR-A

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

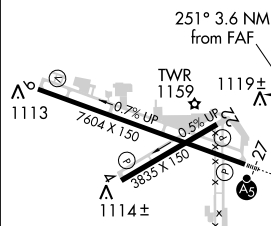
▼ DME required.  
▲ Circling not authorized South of Rwy 9-27.  
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 2600 via YKM VORTAC R-251 then climbing right turn to 4600 via YKM VORTAC R-277 to YKM VORTAC and hold, continue climb-in-hold to 4600.

ATIS <b>125.25</b>	CHINOOK APP CON * <b>123.8 263.15</b>	YAKIMA TOWER * <b>133.25 (CTAF) 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.9</b>	UNICOM <b>122.95</b>
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ELEV 1099 D

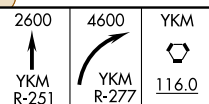


MIRL Rwy 4-22  
HIRL Rwy 9-27  
REIL Rws 4, 9, and 22

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

YAKIMA, WASHINGTON

Amdt 7 17DEC09



CATEGORY	A	B	C	D
CIRCLING	1840-1 741 (800-1)	1840-1 1/4 741 (800-1 1/4)	1840-2 1/4 741 (800-2 1/4)	1840-2 1/2 741 (800-2 1/2)

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

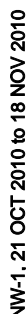
46°34'N-120°33'W

VOR-A

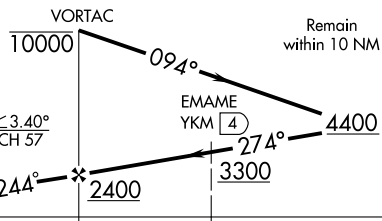


VOR/DME or TACAN RWY 27  
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

**MISSED APPROACH:** Climb to 2600 via YKM VORTAC R-244, then climbing right turn to 4600 via YKM VORTAC R-276 to YKM VORTAC and hold, continue climb-in-hold to 4600 (TACAN aircraft, continue climb to 5000 via YKM VORTAC R-108 to SUNED/YKM 26 DME and hold west, right turns, 108° inbound).

UNICOM  
122.95

**D**



CATEGORY	A	B	C	D
S-27	2100/60 1032 (1100-1¼)	2100-1½ 1032 (1100-1½)	2100-3	1032 (1100-3)
CIRCLING	2100-1¼ 1001 (1100-1¼)	2100-1½ 1001 (1100-1½)	2100-3	1001 (1100-3)

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)  
VOR/DMF or TACAN RWY 27

(WENAS5.WENAS) 10210

## WENAS FIVE DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)  
SL-465 (FAA) YAKIMA, WASHINGTON

ATIS 125.25  
YAKIMA GND CON  
121.9  
YAKIMA TOWER ★  
133.25 (CTAF) 257.8  
CHINOOK DEP CON  
123.8 263.15

ELLENSBURG  
117.9 ELN  
Chan 126  
N47°01.46'-W120°27.51'  
L-13

PERTT  
N46°54.70'  
W120°43.26'  
L-13

SELAH  
N46°42.05'  
W120°32.99'  
L-13

TITON  
N46°42.72'  
W120°44.51'  
L-13

(ORJOR)  
N46°39.35'  
W120°37.40'

WENAS  
N46°35.14'  
W120°39.65'

YAKIMA  
116.0 YKM  
Chan 107

(OJAO)  
N46°43.21'  
W120°26.95'

(OLUWO)  
N46°40.00'  
W120°16.67'

(OHKAR)  
N46°31.43'  
W120°14.28'

(OHAWY)  
N46°28.52'  
W120°16.59'

RUBEL  
N47°01.87'  
W119°38.27'  
L-13

PAPPS  
N46°26.26'  
W119°51.68'  
L-13

SUNED  
N46°17.69'  
W119°57.60'  
L-13

NOTE: This SID requires a minimum climb of 350' per NM to 5500 (875 FPM/150K IAS, 1167 FPM/200K IAS, 1458 FPM/250K IAS) or 4200' ceiling and three miles visibility.

NOTE: Chart not to scale.



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 4, 9: Turn left thence...

TAKE-OFF RUNWAY 22: Turn right thence....

TAKE-OFF RUNWAY 27: Climb runway heading thence....

....Intercept and proceed via YKM R-255 to the WENAS DME Fix (YKM 255/9) thence via (assigned transition).

ELLENSBURG TRANSITION (WENAS5.ELN): From over WENAS DME Fix via 9 DME Arc and V25 to ELN VORTAC.

PAPPS TRANSITION (WENAS5.PAPPS): From over WENAS DME Fix via 9 DME Arc and V204 to PAPPS INT.

PERTT TRANSITION (WENAS5.PERTT): From over WENAS DME Fix via 9 DME Arc and V298 to PERTT INT.

RUBEL TRANSITION (WENAS5.RUBEL): From over WENAS DME Fix via 9 DME Arc and V448 to RUBEL INT.

SELAH TRANSITION (WENAS5.SELAH): From over WENAS DME Fix via 9 DME Arc to SELAH INT.

SUNED TRANSITION (WENAS5.SUNED): From over WENAS DME Fix via 9 DME Arc and V4-298 to SUNED INT.

TITON TRANSITION (WENAS5.TITON): From over WENAS DME Fix via 9 DME Arc and V4 to TITON INT.

NOTE: Climb in holding pattern Southeast of TITON INT, left turns, 284° inbound to 7000 feet before proceeding on course.

WENAS FIVE DEPARTURE

(WENAS5.WENAS) 10210

YAKIMA, WASHINGTON  
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)


NW-1, 21 OCT 2010 to 18 NOV 2010

NW-1, 21 OCT 2010 to 18 NOV 2010

## YAKIMA FIVE DEPARTURE

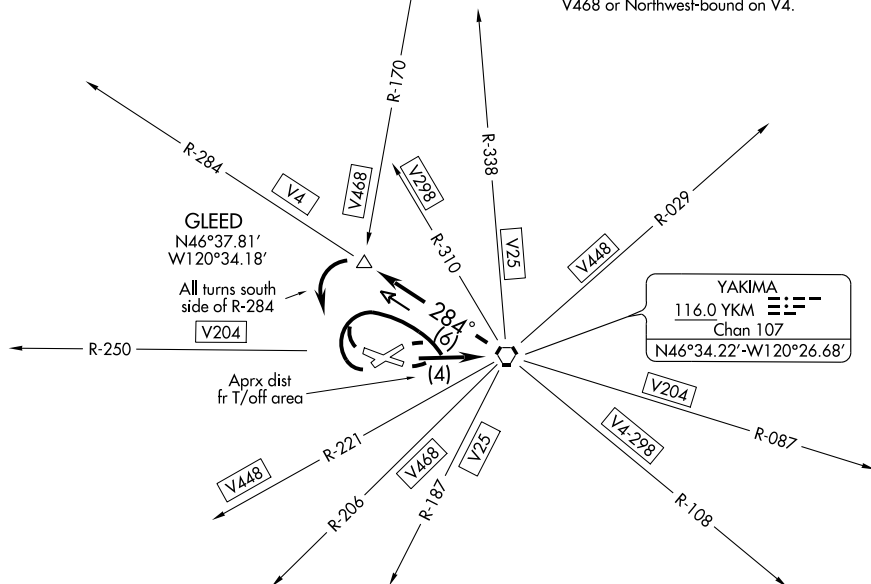
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)  
SL-465 (FAA) YAKIMA, WASHINGTON

ATIS 125.25  
YAKIMA GND CON  
121.9  
YAKIMA TOWER★  
133.25 (CTAF) 257.8  
CHINOOK DEP CON  
123.8 263.15

ELLENSBURG  
117.9 ELN   
Chan 126

NOTE: Minimum climb required:  
Rwys 4 and 9 - 275'/NM to 1700  
Rwy 22 - 350'/NM to 1700  
Rwy 27 - 230'/NM to 2100

MINIMUM CROSSING ALTITUDES:  
Eastbound on V4-298 2000'  
Eastbound on V204 3000'  
Northbound on V25 2800'  
Northeast-bound on V448 3300'  
Southbound on V25 4200'  
Southwest-bound on V448 6800'  
Southwest-bound on V468 2600'  
Westbound on V204 3400'  
Westbound on V468, V4 4100'  
Northwest-bound on V298 2800'  
Departures may be restricted to cross  
GLEED INT at 5000' northbound on  
V468 or Northwest-bound on V4.



NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 4, 22 or 27: Turn right, thence....

TAKE-OFF RUNWAY 9: Turn left, thence....

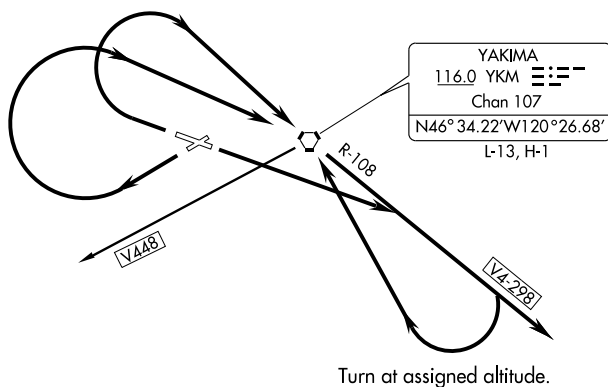
....Climb direct YKM VORTAC. Continue climb on YKM R-284 between the VORTAC and GLEED INT., all turns south of the 284 radial, to cross YKM VORTAC at or above (minimum crossing altitudes). Thence via (assigned route).

ATIS 125.25  
 CLNC DEL  
 121.9  
 YAKIMA GND CON  
 121.9  
 YAKIMA TOWER\*  
 133.25 (CTAF) 257.8  
 CHINOOK DEP CON  
 123.8 263.15

NOTE: TAKE-OFF MINIMUMS: Rwy 4 not authorized.

Rwy 9: 800-4 or standard with a minimum  
 climb of 300' per NM to 5000'.

Rwys 22 and 27: 2500-3 or standard with minimum  
 climb of 300' per NM to 5200'.



NOTE: Chart not to scale.



### DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climb runway heading and outbound YKM R-108. Thence....

TAKE-OFF RUNWAYS 22 and 27: Climbing right turn direct YKM VORTAC and outbound R-108. Thence....

..... Eastbound aircraft V4-298 continue climb on course, other departures continue climb on YKM R-108 until reaching assigned altitude, ( Southwestbound V448 continue minimum climb of 300' per NM to 9500'), then climbing right turn direct YKM VORTAC. All aircraft cross YKM VORTAC at or above MEA or MCA for route of flight.